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Clara M. Johnson,
"Elmhurst"
Pueblo, Colo.

Brought in Indianapolis
Apr. 30th 1919.

By Dallas Lore Sharp

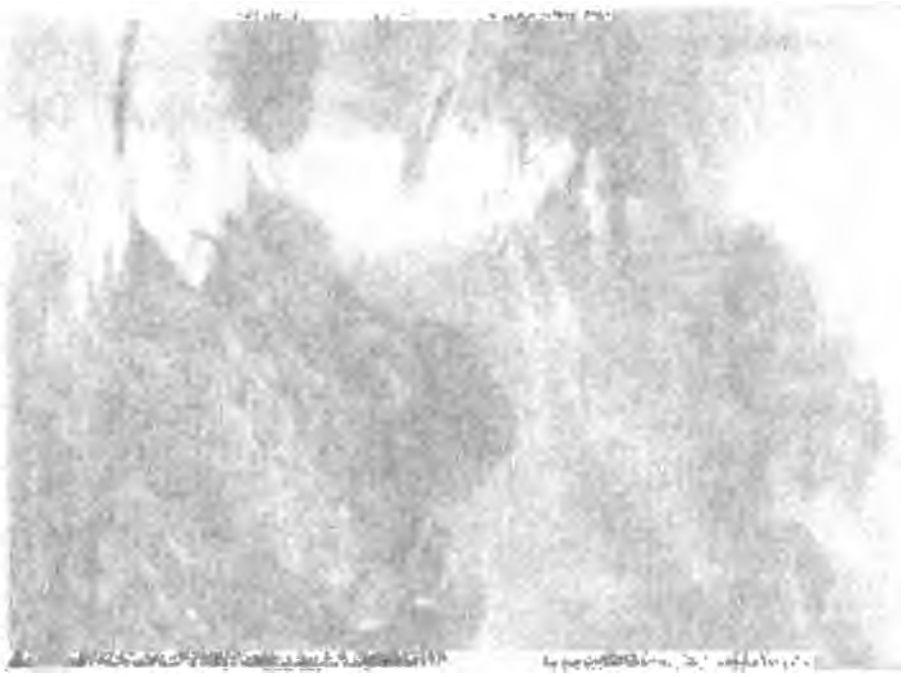
WHERE ROLLS THE OREGON Illustrated.
THE FACE OF THE FIELDS.
THE LAY OF THE LAND.

HOUGHTON MIFFLIN COMPANY
BOSTON AND NEW YORK

THE WHOLE YEAR ROUND

THE MUSKRATS ARE BUILDING

This One



THE WHOLE YEAR ROUND

BY

DALLAS LORE SHARP

WITH ILLUSTRATIONS BY

ROBERT BRUCE HORSFALL

BOSTON AND NEW YORK
HOUGHTON MIFFLIN COMPANY
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1915

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INTRODUCTION

THE writer of this book has four children of his own, and not so very long ago (he can remember it) he was a child himself, and roamed the fields, as still he does, with all the child's love of freedom and joy in the companionship of wild things — wild lives, wild winds, wild places, and the wild hours along the edge of dusk and dawn. And if he has any right to ask other children than his own to tramp the wild places with him through the pages of this book it is because he is still a child and cannot outgrow his love of Saturdays and skates and deep woods and the ways of the wild folk, great and small; and because, again, he has tramped the wild places (for his home is in the woods) more than most of his readers, perhaps, and tramped them the seasons round — stormy nights and lazy autumn days, and summer and winter; and he has seen — only what his readers have seen, no doubt, — the ordinary things, but he has often felt, as all children do at times feel, strange deep things, things more wonderful than anybody ever saw. And yet the ordinary things, ordinary only because we have not watched them and thought about them, are really what we are going out to see; and we are going out in an ordinary way — upon our two feet,

barefoot when we can, in rubber boots if we must; sometimes with a fish-pole, sometimes with a hoe; sometimes with a camera — but never with a gun; and if we see nothing more than the sky and the earth, we shall not have had our tramp in vain — not if the sky is full of clouds or storm or stars; and not if the earth is full of wideness and freshness and freedom; and not if our hearts are full of — it may be, of those strange deep feelings that the hearts of children know.

And so the author hopes that this book in its new cover, with its new name (it is made of four books of the seasons bound in one) will find its way into many homes, where the four separate books went only to the schools. And if it comes to your home, he hopes that it will take you into the fields and woods and, if possible, cause you to love them and all their wild life more.

DALLAS LORE SHARP.

MULLEIN HILL, 1914.

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The subject of the initial for chapter IV is witch-hazel; that for chapter VII, the cocoons of the cecropia, the promethea, and the basket-worm; and that for chapter VIII, a sprig of alder, with the old fruit and a budded catkin. The subjects of the other initials require no identification.

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SPRING

Clara M. Johnson
"Elmhurst"
Pueblo, Colo.

SPRING OF THE YEAR — SHADBUSH (CHAPTER I)

THE SPRING OF THE YEAR

CHAPTER I

"SPRING! SPRING! SPRING!"

WHO is your spring messenger? Is it bird or flower or beast that brings your spring? What sight or sound or smell spells S-P-R-I-N-G to you, in big, joyous letters?

Perhaps it is the frogs. Certainly I could not have a real spring without the frogs. They have peeped "Spring!" to me every time I have had a spring. Perhaps it is the arbutus, or the hepatica, or the pussy-willow, or the bluebird, or the yellow spice-bush, or, if you chance to live in New England, perhaps it is the wood pussy that brings your spring!

Beast, bird, or flower, whatever it is, there comes a day and a messenger and — spring! You know that spring is here. It may snow again before night: no matter; your messenger has brought you the news, brought you the very spring itself, and after all

your waiting through the winter months are you going to be discouraged by a flurry of snow?

"All white and still lie stream and hill —
The winter dread and drear!
When from the skies a bluebird flies,
And — spring is here!"

To be sure, it is here, if the bluebird is your herald.

But how much faith in the weather you must have, and how you must long for the spring before the first bluebird brings it to you! Some sunny March day he drops down out of the blue sky, saying softly, sweetly, "Florida, florida!" as if calling the flowers; and then he is gone! — gone for days at a time, while it snows and blows and rains, freezes and thaws, thaws, thaws, until the March mud looks fitter for clams than for flowers.

So it is with the other first signs. If you want springtime ahead of time, then you must have it in your heart, out of reach of the weather, just as you must grow cucumbers in a hothouse if you want them ahead of time. But there comes a day when cucumbers will grow out of doors; and there comes a day when the bluebird and the song sparrow and all the other heralds stay, when spring has come whether you have a heart or not.

What day is that in your out-of-doors, and what sign have you to mark it? Mr. John Burroughs says his sign is the wake-robin, or trillium. When I was a school-boy it used to be for me the arbutus; but

nowadays it is the shadbush: I have no sure settled spring until I see the shadbush beginning to open misty white in the edge of the woods. Then I can trust the weather; I can open my beehives; I can plough and plant my garden; I can start into the woods for a day with the birds and flowers; for when the shadbush opens, the great gate to the woods and fields swings open — wide open to let everybody in.

But perhaps you do not know what the shadbush is? That does not matter. You can easily enough find that out. Some call it June-berry; others call it service-berry; and the botany calls it *A-me-lan'chi-er ca-na-den'sis*! But that does not matter either. For this is not a botany lesson. It is an account of how springtime comes to *me*, and when and what are its signs. And I would have you read it to think how springtime comes to *you*, and when and what are its signs. So, if the dandelion, and not the shadbush, is your sign, then you must read "dandelion" here every time I write "shadbush."

There is an old saying, "He that would bring home the wealth of the Indies must carry the wealth of the Indies out"; which is to say, those who bring home the wealth of the Indies, must carry out some kind of wealth in exchange. So you who would enjoy or understand what my shadbush means to me must have a shadbush of your own, or a dandelion, or something that is a sign to you that spring is here.

Then, you see, my chapter in the book will become your own.

There are so many persons who do not know one bird from another, one tree from another, one flower from another; who would not know one season from another did they not see the spring hats in the milliner's window or feel the need of a change of coat. I hope you are not one of them. I hope you are on the watch, instead, for the first phœbe or the earliest bloodroot, or are listening to catch the shrill, brave peeping of the little tree-frogs, the hylas.

As for me, I am on the watch for the shadbush. Oh, yes, spring comes before the shadbush opens, but it is likely not to stay. The wild geese trumpet spring in the gray March skies as they pass; a February rain, after a long cold season of snow, spatters your face with spring; the swelling buds on the maples, the fuzzy kittens on the pussy-willows, the opening marsh-marigolds in the meadows, the frogs, the bluebirds — all of these, while they stay, are the spring. But they are not sure to stay over night, here in New England. You may wake up and find it snowing — until the shadbush opens. After that, hang up your

sled and skates, put away your overcoat and mittens; for spring is here, and the honey-bees will buzz every bright day until the October asters are in bloom.

I said if you want springtime ahead of time you must have it in your heart. Of course you must. If your heart is warm and your eye is keen, you can go forth in the dead of winter and gather buds, seeds, cocoons, and living things enough to make a little spring. For the fires of summer are never wholly out. They are only banked in the winter, smouldering always under the snow, and quick to brighten and burst into blaze. There comes a warm day in January, and across your thawing path crawls a woolly-bear caterpillar; a mourning-cloak butterfly flits through the woods, and the juncos sing. That night a howling snowstorm sweeps out of the north; the coals are covered again. So they kindle and darken, until they leap from the ashes of winter a pure, thin blaze in the shadbush, to burn higher and hotter across the summer, to flicker and die away — a line of yellow embers — in the weird witch-hazel of the autumn.

At the sign of the shadbush the doors of my springtime swing wide open. My birds are back, my turtles are out, my long sleeping woodchucks are wide awake. There is not a stretch of woodland or meadow now that shows a trace of winter. Over the pasture the bluets are beginning to drift, as if the haze on the distant hills, floating down in the night,

had been caught in the dew-wet grass. They wash the field to its borders in their delicate azure hue. At the sign of the shadbush the doors of my memory, too, swing wide open, and I am a boy again in the meadows of my old home. The shadbush is in blossom, and the fish are running — the sturgeon up the Delaware; the shad up Cohansey Creek; and through the Lower Sluice, these soft, stirring nights, the catfish are slipping. Is there any real boy now in Lupton's Meadows to watch them come? Oh yes, doubtless; and doubtless there ever shall be. But I would go down for this one night, down in the May moonlight, and listen, as I used to listen years ago, for the quiet *splash splash splash*, as the swarming catfish pass through the shallows of the main ditch, up toward the dam at the pond.

At the sign of the shadbush how swiftly the tides of life begin to rise! How mysteriously their currents run! — the fish swimming in from the sea, the birds flying up from the South, the flowers opening fresh from the soil, the insects coming out from their sleep: life moving everywhere — across the heavens, over the earth, along the deep, dim aisles of the sea!

CHAPTER II

THE SPRING RUNNING

THIS title is Kipling's; the observations that follow are mine; but the real spring running is yours and mine and Kipling's and Mowgli the wolf-child's, whose running Kipling has told us about. Indeed, every child of the earth has felt it, has had the running — every living thing of the land and the sea.

Everything feels it; everything is restless, everything is moving. The renter changes houses; the city dweller goes "down to the shore" or up to the mountains to open his summer cottage; the farmer starts to break up the land for planting; the schoolchildren begin to squirm in their seats and long to fly out of the windows; and "Where are you *going* this summer?" is on every one's lips.

They have all caught the spring running, the only infection I know that you can catch from April skies. The very sun has caught it, too, and is lengthening out his course, as if he hated to stop and go to bed at night. And the birds, that are supposed to go to bed most promptly, they sleep, says the good old poet Chaucer, with open eye, these April nights, so bad is their case of spring running, —

"So priketh hem Nature in hir corages." [1]

[1] So nature pricks (stirs) them in their hearts.

Their long journey northward over sea and land has not cured them yet of their unrest. Only one thing will do it (and I suppose we all should be glad), one sovereign remedy, and that is *family cares*. But they are yet a long way off.

Meantime watch your turkey-hen, how she saunters down the field alone, how pensive she looks, how lost for something to do and somewhere to go. She is sick with this disease of spring. Follow her, keeping out of sight yourself, and lo, a nest, hidden under

a pile of brush in a corner of the pasture fence, half a mile from home!

The turkey-hen has wandered off half a mile to build her nest; but many wild birds have come on their small wings all the way from the forests of the Amazon and have gone on to Hudson Bay and the Fur Countries, just to build their nests and rear their young. A wonderful case of the spring running, you would say; and still more wonderful is the annual journey of the golden plover from Patagonia to Alaska and back, eight thousand miles each way. Yet there is another case that seems to me more mysterious, and quite as wonderful, as the sea seems more mysterious than the land.

It is the spring running of the fish. For when the great tidal waves of bird-life begin to roll northward with the sun, a corresponding movement begins among the denizens of the sea. The cold-blooded fish feel the stirring; the spring running seizes them, and in they come through the pathless wastes of the ocean, waves of them, shoals of them, — sturgeon, shad, herring, — like the waves and flocks of wild geese, warblers, and swallows overhead, — into the brackish water of the bays and rivers and on (the herring) into the fresh water of the ponds.

To watch the herring come up Weymouth Back River into Herring Run here near my home, as I do every April, is to watch one of the most interesting, most mysterious movements of all nature. It was about a century ago that men of Weymouth brought herring in barrels of water by ox-teams from Taunton River and liberated them in the pond at the head of Weymouth Back River. These fish laid their eggs in the grassy margins of the pond that spring and went out down the river to the sea. Later on, the young fry, when large enough to care for themselves, found their way down the river and out to sea.

And where did they go then? and what did they do? Who can tell? for who can read the dark book of the sea? Yet this one thing we know they did, for still they are doing it after all these hundred years, — they came back up the river, when they were full-grown, — up the river, up the run, up into

the pond, to lay their eggs in the waters where they were hatched, in the waters that to them were *home*.

Something very much like this all the other fish are doing, as are the birds also. The spell of *home* is over land and sea, and has been laid upon them all. The bird companies of the fall went south at the inexorable command of Hunger; but a greater than Hunger is in command of the forces of spring. Now our vast bird army of North America, five billion strong, is moving northward at the call of Home. And the hosts of the sea, whose shining billions we cannot number, — they, too, are coming up, some of them far up through the shallow streams to the wood-walled ponds for a drink of the sweet waters of Home.

As a boy I used to go down to the meadows at night to hear the catfish coming, as now I go down to the village by day to see the herring coming. The catfish would swim in from the Cohansey, through the sluices in the bank, then up by way of the meadow ditches to the dam over which fall the waters of Lupton's Pond.

It was a seven- or eight-foot dam, and of course the fish could not climb it. Down under the splashing water they would crowd by hundreds, their moving bodies close-packed, pushing forward, all trying to break through the wooden wall that blocked their way. Slow, stupid things they looked; but was not each big cat head pointed forward? each slow,

cold brain trying to follow and keep up with each swift, warm heart? For the homeward-bound heart knows no barrier; it never stops for a dam.

The herring, too, on their way up the run are stopped by a dam; but the town, in granting to certain men the sole rights to catch the fish, stipulated that a number of the live herring, as many as several barrels full, should be helped over the dam each spring that they might go on up to the pond to deposit their eggs. If this were not done annually, the fish would soon cease to come, and the Weymouth herring would be no more.

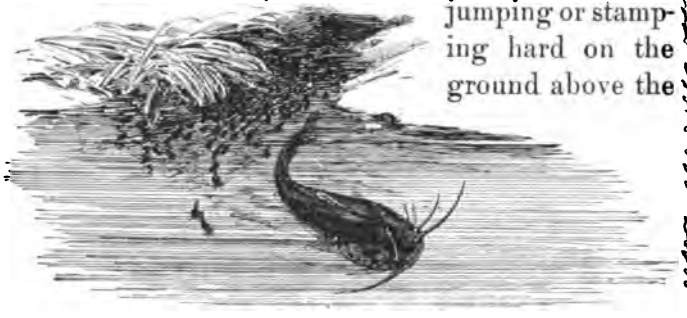
There was no such lift for the catfish under Lupton's dam. I often tossed them over into the pond, and so helped to continue the line; but perhaps there was no need, for spring after spring they returned. They were the young fish, I suppose, new each year, from parent fish that remain inside the pond the year round.

I cannot say now — I never asked myself before — whether it is Mother or Father Catfish who stays with the swarm (it is literally a swarm) of kitten catfish. It may be father, as in the case of Father Stickleback and Father Toadfish, who cares for the children. If it is — I take off my hat to him. I have four of my own; and I think if I had eighteen or twenty more I should have both hands full. But Father Catfish! Did you ever see his brood?

I should say that there might easily be five hun-

dred young ones in the family, though I never have counted them. But you might. If you want to try it, take your small scoop-net of coarse cheesecloth, or mosquito-netting, and go down to the pond this spring. Close along the margin you will see holes in the shallow water running up under the overhanging grass and roots. The holes were made probably by the muskrats. It is in here that the old catfish is guarding the brood.

As soon as you learn to know the holes, you can cover the entrance with your net, and then by jumping or stamping hard on the ground above the



hole, you will drive out the old fish with a flop, the family following in a fine, black cloud. The old fish will swim away, then come slowly back to the scattered swarm, to the little black things that look like small tadpoles, who soon cluster about the parent once more and wiggle away into the deep, dark water of the pond — the strangest family group that I know in all the spring world.

CHAPTER III

AN OLD APPLE TREE

BEYOND the meadow, perhaps half a mile from my window, stands an old apple tree, the last of an ancient line that once marked the boundary between the "upper" and the "lower" pastures. It is a bent, broken, hoary old tree, grizzled with suckers from feet to crown. No one has pruned it for half a century; no one ever gathers its gnarly apples — no one but the cattle who love to lie in its shadow and munch its fruit.

The cows know the tree. One of their winding paths runs under its low-hung branches; and as I frequently travel the cow-paths, I also find my way thither. Yet I do not go for apples, nor just because the cow-path takes me. That old apple tree is hollow, hollow all over, trunk and branches, as hollow as a lodging-house; and I have never known it when it was not "putting up" some wayfaring visitor or some permanent lodger. So I go over, whenever I have a chance, to call upon my friends or pay my respects to the distinguished guests.

This old tree is on the neighboring farm. It does not belong to me, and I am glad; for if it did, then I should have to trim it, and scrape it, and plaster

up its holes, and put a burlap petticoat on it, all because of the gruesome gypsy moths that infest my trees. Oh, yes, that would make it bear better apples, but what then would become of its birds and beasts? Everybody ought to have *one* apple tree that bears birds and beasts — and Baldwin apples, too, of course, if the three sorts of fruit can be made to grow on the same tree. But only the birds and beasts grow well on the untrimmed, unscraped, unplastered, unpetticoated old tree yonder between the pastures. His heart is wide open to every small traveler passing by.

Whenever I look over toward the old tree, I think of the old vine-covered, weather-beaten house in which my grandfather lived, where many a traveler put up over night — to get a plate of grandmother's buckwheat cakes, I think, and a taste of her keen wit. The old house sat in under a grove of pin oak and pine, — "Underwood" we called it, — a sheltered, sheltering spot; with a peddler's stall in the barn, a peddler's place at the table, a peddler's bed in the herby garret, a boundless, fathomless feather-bed, of a piece with the house and the hospitality. There were larger houses and newer, in the neighborhood; but no other house in all the region, not even the tavern, two miles farther down the pike, was half so central, or so homelike, or so full of sweet and juicy gossip. The old apple tree yonder between the woods and the meadow is as central, as

hospitable, and, if animals talk with one another just as full of neighborhood news as was grandfather's roof-tree.

Of course you would never suspect it, passing by. But then, no lover of wild things passes by — never without first stopping, and especially before an old tree all full of holes. Whenever you see a hole in a tree, in a sand-bank, in a hillside, under a rail-pile — anywhere out of doors, stop!

Stop here beside this decrepit apple tree. No, you will find no sign swinging from the front, no door-plate, no letter-box bearing the name of the family residing here. The birds and beasts do not advertise their houses so. They would hide their houses, they would have you pass by; for most persons are rude in the woods and fields, breaking into the homes of the wood-folk as they never would dream of doing in the case of their human neighbors.

There is no need of being rude anywhere, no need of being an unwelcome visitor even to the shyest and most timid of the little people of the fields. Come over with me — they know me in the old apple tree. It is nearly sundown. The evening is near, with night at its heels, for it is an early March day.

We shall not wait long. The doors will open that we may enter — enter into a home of the fields, and, a little way at least, into a life of the fields, for, as I have said, this old tree has a small dweller of some sort the year round.

On this March day we shall be admitted by my owls. They take possession late in winter and occupy the tree, with some curious fellow tenants, until early summer. I can count upon these small screech owls by February, — the forlorn month, the seasonless, hopeless, lifeless month of the year, but for its owls, its thaws, its lengthening days, its cackling pullets, its possible bluebirds, and its being the year's end! At least the ancients called February, not December, the year's end, maintaining, with some sense, that the making of the world was begun in March, that is, with the spring. The owls do not, like the swallows, bring the spring, but they nevertheless help winter with most seemly haste into an early grave.

If, as the dusk comes down, I cannot go over to the tree, I will go to my window and watch. I cannot see him, the grim-beaked baron with his hooked talons, his ghostly wings, his night-seeing eyes, but I know that he has come to his window in the apple-tree turret yonder against the darkening sky, and that he watches with me. I cannot see him swoop downward over the ditches, nor see him quarter the meadow, beating, dangling, dropping between the flattened tussocks; nor can I hear him, as, back on the silent shadows, he slants upward again to his tower. Mine are human eyes, human ears. Even the quick-eared meadow mouse did not hear until the long talons closed and it was too late.

SCREECH OWL — "OUT OVER THE MEADOW HE SAILS"

But there have been times when, like some belated traveler, I have been forced to cross this wild night-land of his; and I have *felt* him pass — so near at times that he has stirred my hair, by the wind — dare I say? — of his mysterious wings. At other times I have heard him. Often on the edge of night I have listened to his quavering, querulous cry from the elm-tops below me by the meadow. But oftener I have watched at the casement here in my castle wall.

Away yonder on the borders of night, dim and gloomy, looms his ancient keep. I wait. Soon on the deepened dusk spread his soft wings, out over the meadow he sails, up over my wooded height, over my moat, to my turret tall, as silent and unseen as the soul of a shadow, except he drift across the face of the full round moon, or with his weird cry cause the dreaming quiet to stir in its sleep and moan.

Now let us go over again to the old tree, this time in May. It will be curious enough, as the soft dusk comes on, to see the round face of the owl in one hole and, out of another hole in the broken limb above, the flat, weazened face of a little tree-toad.

Both creatures love the dusk; both have come forth to their open doors to watch the darkening; both will make off under the cover of the night — one for mice and frogs over the meadow, the other for slugs and insects over the crooked, tangled limbs of the apple tree.

It is strange enough to see them together, but it

is stranger still to think of them together; for it is just such prey as this little toad that the owl has gone over the meadow to catch.

Why does he not take the supper ready here on the shelf? There may be reasons that we, who do not eat tree-toad, know nothing of; but I am inclined to believe that the owl has never seen his fellow lodger in the doorway above, though he must often have heard him trilling gently and lonesomely in the gloaming, when his skin cries for rain!

Small wonder if they have never met! for this gray, squat, disk-toed little monster in the hole, or flattened on the bark of the tree like a patch of lichen, may well be one of the things that are hidden from even the sharp-eyed owl. It is always a source of fresh amazement, the way that this largest of the hylas, on the moss-marked rind of an old tree, can utterly blot himself out before your staring eyes.

The common toads and all the frogs have enemies enough, and it would seem from the comparative scarcity of the tree-toads that they must have enemies, too; but I do not know who they are. This scarcity of the tree-toads is something of a puzzle, and all the more to me, that, to my certain knowledge, this toad has lived in the old Baldwin tree, now, for five years. Perhaps he has been several toads, you say, not one; for who can tell one tree-toad from another? Nobody; and for that reason I made, some time ago, a simple experiment, in order

to see how long a tree-toad might live, unprotected, in his own natural environment.

Upon moving into this house, about nine years ago, we found a tree-toad living in the big hickory by the porch. For the next three springs he reappeared, and all summer long we would find him, now on the tree, now on the porch, often on the railing and backed tight up against a post. Was he one or many? we asked. Then we marked him; and for the next four years we knew that he was himself alone. How many more years he might have lived in the hickory for us all to pet, I should like to know; but last summer, to our great sorrow, the gypsy moth killers, poking in the hole, hit our little friend and left him dead.

It was very wonderful to me, the instinct for home — the love for home, I should like to call it — that this humble little creature showed. Now, a toad is an amphibian to the zoölogist; an ugly gnome with a jeweled eye, to the poet; but to the naturalist, the lover of life for its own sake, who lives next door to his toad, who feeds him a fly or a fat grub now and then, who tickles him to sleep with a rose leaf, who waits as thirstily as the hilltop for him to call the summer rain, who knows his going to sleep for the winter, his waking up for the spring — to such a one, I say, a tree-toad means more than the jeweled eye and the strange amphibious habits.

This small tree-toad had a home, had it in a tree, too, — in a hickory tree, — this toad that dwelt by my house.

"East, west,
Hame 's best,"

croaked our tree-toad in a tremulous, plaintive song that wakened memories in the vague twilight of more old, unhappy, far-off things than any other voice I ever knew.

These two tree-toads could not have been induced to trade houses, the hickory for the apple, because a house to a toad means home, and a home is never in the market. There are many more houses in the land than homes. Most of us are only real-estate dealers. Many of us have never had a home; and none of us has ever had, perhaps, more than one, or could have — that home of our childhood.

This toad seemed to feel it all. Here in the hickory for four years (more nearly seven, I am sure) he lived, single and alone. He would go down to the meadow when the toads gathered there to lay their eggs; but back he would come, without mate or companion, to his tree. Stronger than love of kind, than love of mate, constant and dominant in his slow cold heart was his instinct for home.

If I go down to the orchard and bring up from an apple tree some other toad to dwell in the hole of the hickory, I shall fail. He might remain for the day, but not throughout the night, for with the

gathering twilight there steals upon him an irresistible longing; and guided by it, as bee and pigeon and dog and man are guided, he makes his sure way back to his orchard home.

Would my toad of the Baldwin tree go back beyond the orchard, over the road, over the wide meadow, over to the old tree, half a mile away, if I brought him from there? We shall see. During the coming summer I shall mark him in some manner, and bringing him here to the hickory, I shall then watch the old apple tree yonder to see if he returns. It will be a hard, perilous journey. But his longing will not let him rest; and, guided by his mysterious sense of direction, — for that *one* place, — he will arrive, I am sure, or he will die on the way.

Suppose he never gets back? Only one toad less? A great deal more than that. There in the old Baldwin he has made his home for I don't know how long, hunting over its world of branches in the summer, sleeping down in its deep holes during the winter — down under the chips and punk and castings, beneath the nest of the owls, it may be; for my toad in the hickory always buried himself so, down in the débris at the bottom of the hole, where, in a kind of cold storage, he preserved himself until thawed out by the spring.

I never pass the old apple in the summer but that I stop to pay my respects to the toad; nor in the

winter that I do not pause and think of him asleep in there. He is no longer mere toad. He has passed into the Guardian Spirit of the tree, warring in the green leaf against worm and grub and slug, and in the dry leaf hiding himself, a heart of life, within the thin ribs, as if to save the old shell of a tree to another summer.

Often in the dusk, especially the summer dusk, I have gone over to sit at his feet and learn some of the things that my school-teachers and college professors did not teach me.

Seating myself comfortably at the foot of the tree, I wait. The toad comes forth to the edge of his hole above me, settles himself comfortably, and waits. And the lesson begins. The quiet of the summer evening steals out with the wood-shadows and softly covers the fields. We do not stir. An hour passes. We do not stir. Not to stir is the lesson — one of the primary lessons in this course with the toad.

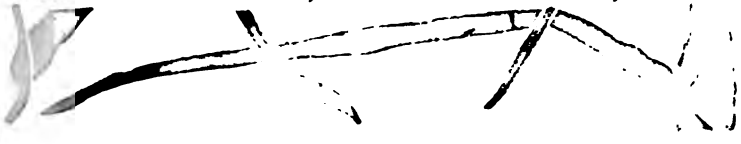
The dusk thickens. The grasshoppers begin to strum; the owl slips out and drifts away; a whip-poor-will drops on the bare knoll near me, clucks and shouts and shouts again, his rapid repetition a thousand times repeated by the voices that call to one another down the long empty aisles of the swamp;

a big moth whirs about my head and is gone; a bat flits squeaking past; a firefly blazes, is blotted out by the darkness, blazes again, and so passes, his tiny lantern flashing into a night that seems the darker for his quick, unsteady glow.

We do not stir. It is a hard lesson. By all my other teachers I had been taught every manner of stirring, and this strange exercise of being still takes me where my body is weakest, and puts me almost out of breath.

What! out of breath by keeping still? Yes, because I had been hurrying hither and thither, doing this and that — doing them so fast for so many years that I no longer understood how to sit down and keep still and do nothing inside of me as well as outside. Of course *you* know how to keep still, for you are children. And so perhaps you do not need to take lessons of teacher Toad. But I do, for I am grown up, and a man, with a world of things to do, a great many of which I do not need to do at all — if only I would let the toad teach me all he knows.

So, when I am tired, I will go over to the toad. I will sit at his feet, where time is nothing, and the worry of work even less. He has all time and no task. He sits out the hour silent, thinking — I know not what, nor need to know. So we will sit in silence, the toad and I, watching Altair burn along the shore of the horizon, and overhead Arcturus, and



the rival fireflies flickering through the leaves of the apple tree. And as we watch, I shall have time to rest and to think. Perhaps I shall have a thought, a thought all my own, a rare thing for any one to have, and worth many an hour of waiting.

CHAPTER IV

A CHAPTER OF THINGS TO SEE THIS SPRING

OUT of the multitude of sights, which twelve sights this spring shall I urge you to see? Why the twelve, of course, that I always look for most eagerly. And the first of these, I think, is the bluebird.

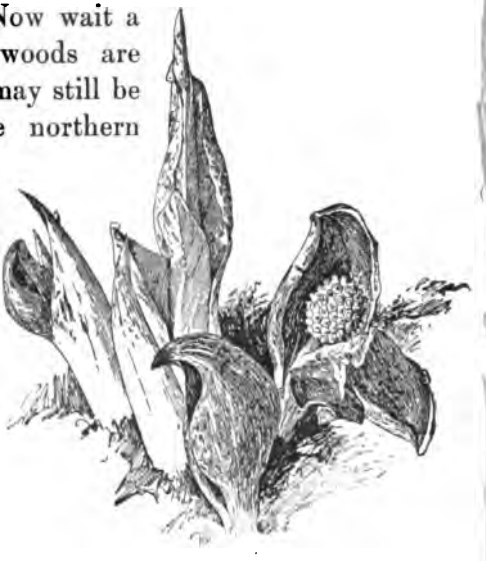
I

"Have you seen a bluebird yet?" some friend will ask me, as March comes on. Or it will be, "I have seen my first bluebird!" as if seeing a first bluebird were something very wonderful and important. And so it is; for the sight of the first March bluebird is the last sight of winter and the first sight of spring. The brown of the fertile earth is on its breast, the blue of the summer sky is on its back, and in its voice is the clearest, sweetest of all invitations to come out of doors.

Where has he spent the winter? Look it up. What has brought him back so early? Guess at it. What does he say as he calls to you? Listen. What has John Burroughs written about him? Look it up and read.

II

You must see the skunk-cabbage abloom in the swamp. You need not pick it and carry it home for the table — just see it. But be sure you see it. Get down and open the big purple-streaked spathe, as it spears the cold mud, and look at the "spadix" covered with its tiny but perfect flowers. Now wait a minute. The woods are still bare; ice may still be found on the northern slopes, while here before you, like a wedge splitting the frozen soil, like a spear cleaving through the earth from the other, the summer, side of the world, is this broad blade of life letting up almost the first cluster of the new spring's flowers. Wait a moment longer and you may hear your first bumblebee, as he comes humming at the door of the cabbage for a taste of new honey and pollen.



III

Among the other early signs of spring, you should see a flock of red-winged blackbirds! And what a sight they are upon a snow-covered field! For often after their return it will snow again, when the brilliant, shining birds in black with their red epaulets make one of the most striking sights of the season.

IV

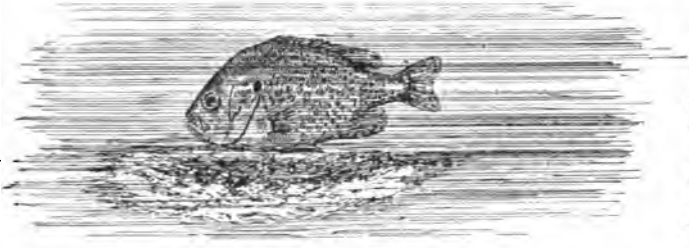
Another bird event that you should witness is the arrival of the migrating warblers. You will be out one of these early May days when there will be a stirring of small birds in the bushes at your side, in the tall trees over your head — everywhere! It is the warblers. You are in the tide of the tiny migrants — yellow warblers, pine warblers, myrtle warblers, black-throated green warblers — some of them on their way from South America to Labrador. You must be in the woods and see them as they come.

V

You should see the "spice-bush" (wild allspice or fever-bush or Benjamin-bush) in bloom in the damp March woods. And, besides that, you should see with your own eyes under some deep, dark forest trees the blue hepatica and on some bushy hillside the pink arbutus. (For fear I forget to tell you in the chapter of things to do, let me now say that you should take a day this spring and go "may-flowering.")

VI

There are four nests that you should see this spring: a hummingbird's nest, saddled upon the horizontal limb of some fruit or forest tree, and looking more like a wart on the limb than a nest; secondly, the nest, eggs rather, of a turtle buried in the soft sand along the margin of a pond or out in some cultivated field; thirdly, the nest of a sunfish (pumpkin-seed) in the shallow water close up



along the sandy shore of the pond; and fourthly, the nest of the red squirrel, made of fine stripped cedar bark, away up in the top of some tall pine tree! I mean by this that there are many other interesting nest-builders besides the birds. Of all the difficult nests to find, the hummingbird's is the most difficult. When you find one, please write to me about it.

VII

You should see a "spring peeper," the tiny Pickering's frog — *if you can*. The marsh and the meadows will be vocal with them, but one of the hardest

things that you will try to do this spring will be to see the shrill little piper, as he plays his bagpipe in the rushes at your very feet. But hunt until you do see him. It will sharpen your eyes and steady your patience for finding other things.

VIII

You should see the sun come up on a May morning. The dawn is always a wonderful sight, but never at other times attended with quite the glory, with quite the music, with quite the sweet fragrance, with quite the wonder of a morning in May. Don't fail to see it. Don't fail to rise with it. You will feel as if you had wings — something better even than wings.

IX

You should see a farmer ploughing in a large field — the long straight furrows of brown earth; the blackbirds following behind after worms; the rip of the ploughshare; the roll of the soil from the smooth mould-board — the wealth of it all. For in just such fields is the wealth of the world, and the health of it, too. Don't miss the sight of the ploughing.

X

Go again to the field, three weeks later, and see it all green with sprouting corn, or oats, or one of a score of crops. Then — but in "The Fall of the Year" I ask you to go once more and see that field

all covered with shocks of ripened corn, shocks that are pitched up and down its long rows of corn-butts like a vast village of Indian tepees, each tepee full of golden corn.

XI

You should see, hanging from a hole in some old apple tree, a long thin snake-skin! It is the latch-string of the great crested fly-catcher. Now why does this bird always use a snake-skin in his nest? and why does he usually leave it hanging loose outside the hole? Questions, these, for you to think about. And if you will look sharp, you will see in even the commonest things questions enough to keep you thinking as long as you live.

XII

You should see a dandelion. A dandelion? Yes, a dandelion, "fringing the dusty road with harmless gold." But that almost requires four eyes — two to see the dandelion and two more to see the gold — the two eyes in your head, and the two in your imagination. Do you really know how to see anything? Most persons have eyes, but only a few really see. This is because they cannot look hard and steadily at anything. The

first great help to real seeing is to go into the woods knowing what you hope to see — seeing it in your eye, as we say, before you see it in the out-of-doors. No one would ever see a tree-toad on a mossy tree or a whip-poor-will among the fallen leaves who did not have tree-toads and whip-poor-wills in mind. Then, secondly, look at the thing *hard* until you see in it something peculiar, something different from anything like it that you ever saw before. Don't dream in the woods; don't expect the flowers to tell you their names or the wild things to come up and ask you to wait while they perform for you.

CHAPTER V

IF YOU HAD WINGS

IF you had wings, why of course you would wear feathers instead of clothes, and you might be a crow! And then of course you would steal corn, and run the risk of getting three of your big wing feathers shot away.

All winter long, and occasionally during this spring, I have seen one of my little band of crows flying about with a big hole in his wing, — at least three of his large wing feathers gone, shot away probably last summer, — which causes him to fly with a list or limp, like an automobile with a flattened tire, or a ship with a shifted ballast.

Now for nearly a year that crow has been hobbling about on one whole and one half wing, trusting to

luck to escape his enemies, until he can get three new feathers to take the places of those that are missing. "Well, why does n't he get them?" you ask. If you were that crow, how would you get them? Can a crow, by taking thought, add three new feathers to his wing?

Certainly not. That crow must wait until wing-feather season comes again, just as an apple tree must wait until apple-growing season comes to hang its boughs with luscious fruit. The crow has nothing to do with it. His wing feathers are supplied by Nature once a year (after the nesting-time), and if a crow loses any of them, even if right after the new feathers had been supplied, that crow will have to wait until the season for wing feathers comes around once more — if indeed he can wait and does not fall a prey to hawk or owl or the heavy odds of winter.

But Nature is not going to be hurried on that account, nor caused to change one jot or tittle from her wise and methodical course. The Bible says that the hairs of our heads are numbered. So are the feathers on a crow's body. Nature knows just how many there are altogether; how many there are of each sort — primaries, secondaries, tertials, greater coverts, middle coverts, lesser coverts, and scapulars — in the wing; just how each sort is arranged; just when each sort is to be moulted and renewed. If Master Crow does not take care of his

clothes, then he will have to go without until the time for a new suit comes; for Mother Nature won't patch them up as your mother patches up yours.

But now this is what I want you to notice and think about: that just as an apple falls according to a great law of Nature, so a bird's feathers fall according to a law of Nature. The moon is appointed for seasons; the sun knoweth his going down; and so light and insignificant a thing as a bird's feather not only is appointed to grow in a certain place at a certain time, but also knoweth its falling off.

Nothing could look more haphazard, certainly, than the way a hen's feathers seem to drop off at moulting time. The most forlorn, undone, abject creature about the farm is the half-moulted hen. There is one in the chicken-yard now, so nearly naked that she really is ashamed of herself, and so miserably helpless that she squats in a corner all night, unable to reach the low poles of the roost. It is a critical experience with the hen, this moulting of her feathers; and were it not for the protection of the yard it would be a fatal experience, so easily could she be captured. Nature seems to have no hand in the business at all; if she has, then what a mess she is making of it!

But pick up the hen, study the falling of the feathers carefully, and lo! here is law and order, every feather as important to Nature as a star, every quill as a planet, and the old white hen as mightily

looked after by Nature as the round sphere of the universe!

Once a year, usually after the nesting-season, it seems a physical necessity for most birds to renew their plumage.

We get a new suit (some of us) because our old one wears out. That is the most apparent cause for the new annual suit of the birds. Yet with them, as with some of us, the feathers go out of fashion, and then the change of feathers is a mere matter of style, it seems.

For severe and methodical as Mother Nature must be (and what mother or teacher or ruler, who has great things to do and a multitude of little things to attend to, must not be severe and methodical?) — severe, I say, as Mother Nature must be in looking after her children's clothes, she has for all that a real motherly heart, it seems.

For see how she looks after their wedding garments — giving to most of the birds a new suit, gay and gorgeous, especially to the bridegrooms, as if fine feathers *did* make a fine bird! Or does she do all of this to meet the fancy of the bride, as the scientists tell us? Whether so or not, it is a fact that among the birds it is the bridegroom who is adorned for his wife, and sometimes the fine feathers come by a special moult — an extra suit for him!

Take Bobolink, for instance. He has two complete moults a year, two new suits, one of them his wedding

suit. Now, as I write, I hear him singing over the meadow — a jet-black, white, and cream-buff lover, most strikingly adorned. His wife, down in the grass, looks as little like him as a sparrow looks like a blackbird. But after the breeding-season he will moult again, changing color so completely that he and his wife and children will all look alike, all like sparrows, and will even lose their names, flying south now under the name of "reedbirds."

Bobolink passes the winter in Brazil; and in the spring, just before the long northward journey begins, he lays aside his fall traveling clothes and puts on his gay wedding garments and starts north for his bride. But you would hardly know he was so dressed, to look at him; for, strangely enough, he is not black and white, but still colored like a sparrow, as he was in the fall. *Apparently* he is. Look at him more closely, however, and you will find that the brownish-yellow color is all caused by a veil of fine fringes hanging from the edges of the feathers. The bridegroom wearing the wedding veil? Yes! Underneath is the black and white and cream-buff suit. He starts northward; and, by the time he reaches Massachusetts, the fringe veil is worn off and the black and white bobolink appears. Specimens taken after their arrival here still show traces of the brownish-yellow veil.

Many birds do not have this early spring moult at all; and with most of those that do, the great

wing feathers are not then renewed as are bobolink's, but only at the annual moult after the nesting is done. The great feathers of the wings are, as you know, the most important feathers a bird has; and the shedding of them is so serious a matter that Nature has come to make the change according to the habits and needs of the birds. With most birds the body feathers begin to go first, then the wing feathers, and last those of the tail. But the shedding of the wing feathers is a very slow and carefully regulated process.

In the wild geese and other water birds the wing feathers drop out with the feathers of the body, and go so nearly together that the birds really cannot fly. On land you could catch the birds with your hands. But they keep near or on the water and thus escape, though times have been when it was necessary to protect them at this season by special laws; for bands of men would go into their nesting-marshes and kill them with clubs by hundreds!

The shedding of the feathers brings many risks to the birds; but Nature leaves none of her children utterly helpless. The geese at this time cannot fly because their feathers are gone; but they can swim, and so get away from most of their natural enemies. On the other hand, the hawks that hunt by wing, and must have wings always in good feather, or else perish, lose their feathers so slowly that they never feel their loss. It takes a hawk nearly a year to get a complete

change of wing feathers, one or two dropping out from each wing at a time, at long intervals apart.

Then here is the gosling, that goes six weeks in down, before it gets its first feathers, which it sheds within a few weeks, in the fall. Whereas the young quail is born with quills so far grown that it is able to fly almost as soon as it is hatched. These are real mature feathers; but the bird is young and soon outgrows these first flight feathers, so they are quickly lost and new ones come. This goes on till fall, *several* moults occurring the first summer to meet the increasing weight of the little quail's growing body.

I said that Nature was severe and methodical, and so she is, where she needs to be, so severe that you are glad, perhaps, that you are not a crow. But Nature, like every wise mother, is severe only where she needs to be. A crow's wing feathers are vastly important to him. Let him then take care of them, for they are the best feathers made and are put in to stay a year. But a crow's tail feathers are not so vastly important to him; he could get on, if, like the rabbit in the old song, he had no tail at all.

In most birds the tail is a kind of balance or steering-gear, and not of equal importance with the wings. Nature, consequently, seems to have attached less importance to the feathers of the tail. They are not so firmly set, nor are they of the same quality or kind; for, unlike the wing feathers, if a tail feather is lost

through accident, it is made good, no matter when. How do you explain that? Do you think I believe that old story of the birds roosting with their tails out, so that, because of generations of lost tails, those feathers now grow expecting to be plucked by some enemy, and therefore have only a temporary hold?

The normal, natural way, of course, is to replace a lost feather with a new one as soon as possible. But, in order to give extra strength to the wing feathers, Nature has found it necessary to check their frequent change; and so complete is the check that the annual moult is required to replace a single one. The Japanese have discovered the secret of this check, and are able by it to keep certain feathers in the tails of their cocks growing until they reach the enormous length of ten to twelve feet.

My crow, it seems, lost his three feathers last summer just after his annual moult; the three broken shafts he carries still in his wing, and must continue to carry, as the stars must continue their courses, until those three feathers have rounded out their cycle to the annual moult. The universe of stars and feathers is a universe of law, of order, and of reason.

CHAPTER VI

A CHAPTER OF THINGS TO DO THIS SPRING

I DO not know where to begin — there are so many interesting things to do this spring! But, while we ought to be interested in all of the out-of-doors, it is very necessary to select some *one* field, say, the birds or flowers, for *special* study. That would help us to decide what to do this spring.

I

If there is still room under your window, or on the clothes-pole in your yard, or in a neighboring tree, nail up another bird-house. (Get "Methods of Attracting Birds" by Gilbert H. Trafton.) If the bird-house is on a pole or post, invert a large tin pan over the end of the post and nail the house fast upon it. This will keep cats and squirrels from disturbing the birds. If the bird-house is in a tree, saw off a limb, if you can without hurting the tree, and do the same there. Cats are our birds' worst enemies.

II

Cats! Begin in your own home and neighborhood a campaign against the cats, to reduce their number and to educate their owners to the need of keeping them well fed and shut up in the house from early

evening until after the early morning; for these are the cats' natural hunting hours, when they do the greatest harm to the birds.

This does not mean any cruelty to the cat — no stoning, no persecution. The cat is not at fault. It is the keepers of the cats who need to be educated. Out of every hundred nests in my neighborhood the cats of two farmhouses destroy ninety-five! The state must come to the rescue of the birds by some new rigid law reducing the number of cats.

III

Speaking of birds, let me urge you to begin your watching and study early — with the first robins and bluebirds — and to select some near-by park or wood-lot or meadow to which you can go frequently. There is a good deal in getting intimately acquainted with a locality, so that you know its trees individually, its rocks, walls, fences, the very qualities of its soil. Therefore you want a small area, close at hand. Most observers make the mistake of roaming first here, then there, spending their time and observation in finding their way around, instead of upon the birds to be seen. You must get used to your paths and trees before you can see the birds that flit about them.

IV

In this haunt that you select for your observation, you must study not only the birds but the trees, and

the other forms of life, and the shape of the ground (the "lay" of the land) as well, so as to know *all* that you see. In a letter just received from a teacher, who is also a college graduate, occurs this strange description: "My window faces a hill on which straggle brown houses among the deep green of elms or oaks or maples, I don't know which." Perhaps the hill is far away; but I suspect that the writer, knowing my love for the out-of-doors, wanted to give me a vivid picture, but, not knowing one tree from another, put them all in so I could make my own choice!

Learn your common trees, common flowers, common bushes, common animals, along with the birds.

V

Plant a garden, if only a pot of portulacas, and *care* for it, and watch it grow! Learn to dig in the soil and to love it. It is amazing how much and how many things you can grow in a box on the window-sill, or in a corner of the dooryard. There are plants for the sun and plants for the shade, plants for the wall, plants for the very cellar of your house. Get you a bit of earth and plant it, no matter how busy you are with other things this spring.

VI

There are four excursions that you should make this spring: one to a small pond in the woods; one

to a deep, wild swamp; one to a wide salt marsh or fresh-water meadow; and one to the seashore — to a wild rocky or sandy shore uninhabited by man.

There are particular birds and animals as well as plants and flowers that dwell only in these haunts; besides, you will get a sight of four distinct kinds of landscape, four deep impressions of the face of nature that are altogether as good to have as the sight of four flowers or birds.

VII

Make a calendar of *your* spring (read "Nature's Diary" by Francis H. Allen) — when and where you find your first bluebird, robin, oriole, etc.; when and where you find your first hepatica, arbutus, saxifrage, etc.; and, as the season goes on, when and where the doings of the various wild things take place.

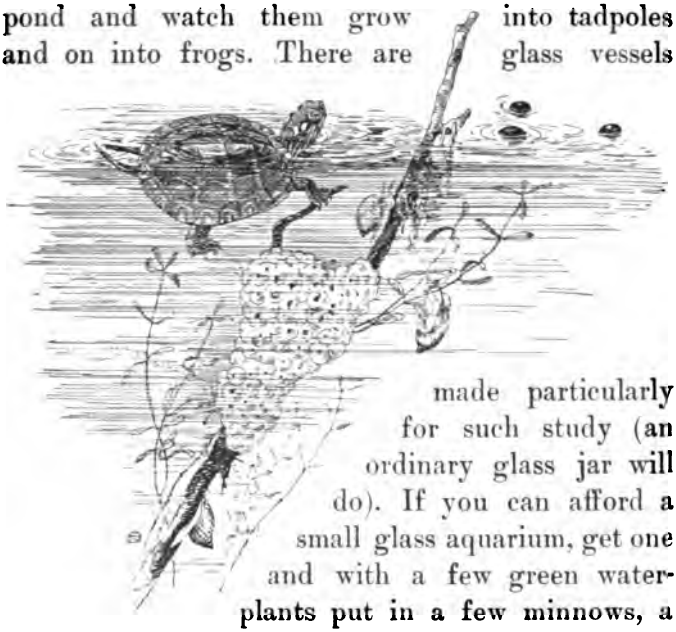
VIII

Boy or girl, you should go fishing — down to the pond or the river where you go to watch the birds. Suppose you do not catch any fish. That does n't matter; for you have gone out to the pond with a pole in your hands (a pole is a *real* thing); you have gone with the *hope* (hope is a *real* thing) of catching *fish* (fish are *real* things); and even if you catch no fish, you will be sure, as you wait for the

fish to bite, to hear a belted kingfisher, or see a painted turtle, or catch the breath of the sweet leaf-buds and clustered catkins opening around the wooded pond. It is a very good thing for the young naturalist to learn to sit still. A fish-pole is a great help in learning that necessary lesson.

IX

One of the most interesting things you can do for special study is to collect some frogs' eggs from the pond and watch them grow into tadpoles and on into frogs. There are glass vessels



made particularly for such study (an ordinary glass jar will do). If you can afford a small glass aquarium, get one and with a few green water-plants put in a few minnows, a snail or two, a young turtle, water-beetles, and frogs' eggs, and watch them grow.

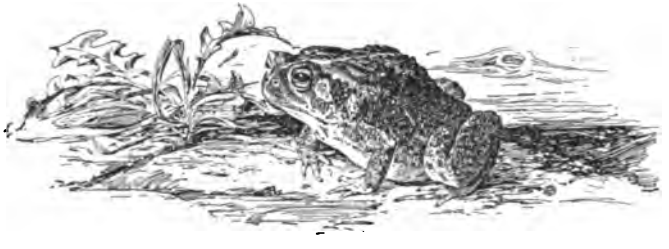
X

You should get up by half past three o'clock (at the earliest streak of dawn) and go out into the new morning with the birds! You will hardly recognize the world as that in which your humdrum days (there are no such days, really) are spent! All is fresh, all is new, and the bird-chorus! "Is it possible," you will exclaim, "that this can be the earth?"

Early morning and toward sunset are the best times of the day for bird-study. But if there was not a bird, there would be the sunrise and the sunset — the wonder of the waking, the peace of the closing, day.

XI

I am not going to tell you that you should make a collection of beetles or butterflies (you should *not*



make a collection of birds or birds' eggs) or of pressed flowers or of minerals or of arrow-heads or of — anything. Because, while such a collection is of great interest and of real value in teaching you names and things, still there are better ways of studying living nature. For instance, I had rather have

you tame a hop-toad, feed him, watch him evening after evening all summer, than make any sort of dead or dried or pressed collection of anything. Live things are better than those things dead. Better know one live toad under your doorstep than bottle up in alcohol all the reptiles of your state.

XII

Finally you should remember that kindliness and patience and close watching are the keys to the out-of-doors; that only sympathy and gentleness and quiet are welcome in the fields and woods. What, then, ought I to say that you should do finally?

CHAPTER VII

THE PALACE IN THE PIG-PEN

"YOU have taken a handful of my wooded acres," says Nature to me, "and if you have not improved them, you at least have changed them greatly. But they are mine still. Be friendly now, go softly, and you shall have them all — and I shall have them all, too. We will share them together."

And we do. Every part of the fourteen acres is mine, yielding some kind of food or fuel or shelter. And every foot, yes, every foot, is Nature's; as entirely hers as when the thick primeval forest stood here. The apple trees are hers as much as mine, and she has ten different bird families that I know of, living in them this spring. A pair of crows and a pair of red-tailed hawks are nesting in the wood-lot; there are at least three families of chipmunks in as many of my stone-piles; a fine old tree-toad sleeps on the porch under the climbing rose; a hornet's nest hangs in a corner of the eaves; a small colony of swifts thunder in the chimney; swallows twitter in the hay-loft; a chipmunk and a half-tame gray squirrel feed in the barn; and — to bring an end to this bare beginning — under the roof of the pig-pen dwell a pair of phœbes.

To make a bird-house of a pig-pen, to divide it between the pig and the bird — this is as far as Nature can go, and this is certainly enough to redeem the whole farm. For she has not sent an outcast or a scavenger to dwell in the pen, but a bird of character, however much he may lack in song or color. Phœbe does not make up well in a picture; neither does he perform well as a singer; there is little to him, in fact, but personality — personality of a kind and (may I say?) quantity, sufficient to make the pig-pen a decent and respectable neighborhood.

Phœbe is altogether more than his surroundings. Every time I go to feed the pig, he lights upon a post near by and says to me, "It 's what you are! Not what you do, but how you do it!" — with a launch into the air, a whirl, an unerring snap at a cabbage butterfly, and an easy drop to the post again, by way of illustration. "Not where you live, but how you live there; not the feathers you wear, but how you wear them — it is what you are that counts!"

There is a difference between being a "character" and having one. My phœbe "lives over the pig," but I cannot feel familiar with a bird of his air and carriage, who faces the world so squarely, who settles upon a stake as if he owned it, who lives a prince in my pig-pen.

Look at him! How alert, able, free! Notice the limber drop of his tail, the ready energy it suggests.

By that one sign you would know the bird had force. He is afraid of nothing, not even the cold; and he migrates only because he is a fly-catcher, and is thus compelled to. The earliest spring day, however, that you find the flies buzzing in the sun, look for phœbe. He is back, coming alone and long before it is safe. He was one of the first of my birds to return this spring.

And it was a fearful spring, this of which I am telling you. How Phœbe managed to exist those miserable March days is a mystery. He came directly to the pen as he had come the year before, and his presence in that bleakest of Marches gave the weather its only touch of spring.

The same force and promptness are manifest in the domestic affairs of the bird. One of the first to arrive this spring, he was the first to build and bring off a brood — or, perhaps, *she* was. And the size of the brood — of the broods, for there was a second, and a third!

Phœbe appeared without his mate, and for nearly three weeks he hunted in the vicinity of the pen, calling the day long, and, toward the end of the second week, occasionally soaring into the air, fluttering, and pouring forth a small, ecstatic song that seemed fairly forced from him.

These aerial bursts meant just one thing: *she* was coming, was coming soon! Was she coming or was he getting ready to go for her? Here he had been

for nearly three weeks, his house-lot chosen, his mind at rest, his heart beating faster with every sunrise. It was as plain as day that he knew — was certain — just how and just when something lovely was going to happen. I wished I knew. I was half in love with her myself; and I, too, watched for her.

On the evening of April 14th, he was alone as usual. The next morning a pair of phœbes flitted in and out of the windows of the pen. Here she was. Will some one tell me all about it? Had she just come along and fallen instantly in love with him and his fine pig-pen? It is pretty evident that he nested here last year. Was she, then, his old mate? Did they keep together all through the autumn and winter? If so, then why not together all the way back from Florida to Massachusetts?

Here is a pretty story. But who will tell it to me?

For several days after she came, the weather continued raw and wet, so that nest-building was greatly delayed. The scar of an old, last year's nest still showed on a stringer, and I wondered if they had decided on this or some other site for the new nest. They had not made up their minds, for when they did start it was to make three beginnings in as many places.

Then I offered a suggestion. Out of a bit of stick, branching at right angles, I made a little bracket and tacked it up on one of the stringers. It ap-

pealed to them at once, and from that moment the building went steadily on.

Saddled upon this bracket, and well mortared to the stringer, the nest, when finished, was as safe as a castle. And how perfect a thing it was! Few nests, indeed, combine the solidity, the softness, and the exquisite inside curve of Phœbe's.

In placing the bracket, I had carelessly nailed it under one of the cracks in the loose board roof. The nest was receiving its first linings when there came a long, hard rain that beat through the crack and soaked the little cradle. This was serious, for a great deal of mud had been worked into the thick foundation, and here, in the constant shade, the dampness would be long in drying out.

The builders saw the mistake, too, and with their great good sense immediately began to remedy it. They built the bottom up thicker, carried the walls over on a slant that brought the outermost point within the line of the crack, then raised them until the cup was as round-rimmed and hollow as the mould of Mrs. Phœbe's breast could make it.

The outside of the nest, its base, is broad and rough and shapeless enough; but nothing could be softer and lovelier than the inside, the cradle, and nothing drier, for the slanting walls of the nest shed every drop from the leafy crack above.

Wet weather followed the heavy rain until long after the nest was finished. The whole structure was

as damp and cold as a newly plastered house. It felt wet to my touch. Yet I noticed that the birds were already brooding. Every night and often during the day I would see one of them in the nest — so deep in, that only a head or a tail showed over the round rim.

After several days I looked to see the eggs, but to my surprise found the nest empty. It had been robbed, I thought, yet by what creature I could not imagine. Then down cuddled one of the birds again —and I understood. Instead of wet and cold, the nest to-day was warm to my hand, and dry almost to the bottom. It had changed color, too, all the upper part having turned a soft silver-gray. She (I am sure it was she) had not been brooding her eggs at all; she had been brooding her mother's thought of them; and for them had been nestling here these days and nights, *drying and warming* their damp cradle with the fire of her life and love.

In due time the eggs came, — five of them, white, spotless, and shapely. While the little phœbe hen was hatching them, I gave my attention further to the cock.

Our intimate friendship revealed a most pleasing nature in phœbe. Perhaps such close and continued association would show like qualities in every bird, even in the kingbird; but I fear only a woman, like Mrs. Olive Thorne Miller, could find them in him. Not much can be said of this flycatcher family, ex-

cept that it is useful — a kind of virtue that gets its chief reward in heaven. I am acquainted with only four of the other nine Eastern members, — crested flycatcher, kingbird, wood pewee, and chebec, — and each of these has some redeeming attribute besides the habit of catching flies.

They are all good nest-builders, good parents, and brave, independent birds; but aside from phœbe and pewee — the latter in his small way the sweetest voice of the oak woods — the whole family is an odd lot, cross-grained, cross-looking, and about as musical as a family of ducks. A duck seems to know that he cannot sing. A flycatcher knows nothing of his shortcomings. He believes he can sing, and in time he will prove it. If desire and effort count for anything, he certainly must prove it in time. How long the family has already been training, no one knows. Everybody knows, however, the success each flycatcher of them has thus far attained. It would make a good minstrel show, doubtless, if the family would appear together. In chorus, surely, they would be far from a tuneful choir. Yet individually, in the wide universal chorus of the out-of-doors, how much we should miss the kingbird's metallic twitter and the chebec's insistent call!

There was little excitement for phœbe during this period of incubation. He hunted in the neighborhood and occasionally called to his mate, contented enough perhaps, but certainly sometimes appearing tired.

PHŒBE AND HER YOUNG

One rainy day he sat in the pig-pen window looking out at the gray, wet world. He was humped and silent and meditative, his whole attitude speaking the extreme length of his day, the monotony of the drip, drip, drip from the eaves, and the sitting, the ceaseless sitting, of his brooding wife. He might have hastened the time by catching a few flies for her or by taking her place on the nest; but I never saw him do it.

Things were livelier when the eggs hatched, for it required a good many flies a day to keep the five young ones growing. And how they grew! Like bread sponge in a pan, they began to rise, pushing the mother up so that she was forced to stand over them; then pushing her out until she could cling only to the side of the nest at night; then pushing her off altogether. By this time they were hanging to the outside themselves, covering the nest from sight almost, until finally they spilled off upon their wings.

Out of the nest upon the air! Out of the pen and into a sweet, wide world of green and blue and of golden light! I saw one of the broods take this first flight, and it was thrilling.

The nest was placed back from the window and below it, so that in leaving the nest the young would have to drop, then turn and fly up to get out. Below was the pig.

As they grew, I began to fear that they might try

their wings before this feat could be accomplished, and so fall to the pig below. But Nature, in this case, was careful of her pearls. Day after day they clung to the nest, even after they might have flown; and when they did go, it was with a sure and long flight that carried them out and away to the tops of the neighboring trees.

They left the nest one at a time and were met in the air by their mother, who, darting to them, calling loudly, and, whirling about them, helped them as high and as far away as they could go.

I wish the simple record of these family affairs could be closed without one tragic entry. But that can rarely be of any family. Seven days after the first brood were awing, I found the new eggs in the nest. Soon after that the male bird disappeared. The second brood had now been out a week, and in all that time no sight or sound was had of the father.

What happened? Was he killed? Caught by a cat or a hawk? It is possible; and this is an easy and kindly way to think of him. It is not impossible that he may have remained as leader and protector to the first brood; or (perish the thought!) might he have grown weary at sight of the second lot of five eggs, of the long days and the neglect that they meant for him, and out of jealousy and fickleness wickedly deserted?

I hope it was death, a stainless, even ignominious death by one of my neighbor's many cats.

Death or desertion, it involved a second tragedy. Five such young ones at this time were too many for the mother. She fought nobly; no mother could have done more. All five were brought within a few days of flight; then, one day, I saw a little wing hanging listlessly over the side of the nest. I went closer. One had died. It had starved to death. There were none of the parasites in the nest that often kill whole broods. It was a plain case of sacrifice, — by the mother, perhaps; by the other young, maybe — one for the other four.

But she did well. Nine such young birds to her credit since April. Who shall measure her actual use to the world? How does she compare in value with the pig? Weeks later I saw several of her brood along the meadow fence hawking for flies. They were not far from my cabbage-patch.

I hope a pair of them will return to me next spring and that they will come early. Any bird that deigns to dwell under roof of mine commands my friendship. But no other bird takes Phœbe's place in my affections; there is so much in him to like, and he speaks for so much of the friendship of nature.

"Humble and inoffensive bird" he has been called by one of our leading ornithologies — because he comes to my pig-pen! Inoffensive! this bird with the cabbage butterfly in his beak! The faint and damning praise! And humble? There is not

a humble feather on his body. Humble to those who see the pen and not the bird. But to me — why, the bird has made a palace of my pig-pen!

The very pig seems less a pig because of this exquisite association; and the lowly work of feeding the creature has been turned for me by Phœbe into a poetic course in bird study.

CHAPTER VIII

IS IT A LIFE OF FEAR?

THERE was a swish of wings, a flash of gray, a cry of pain; a squawking, cowering, scattering flock of hens; a weakly fluttering pullet; and yonder, swinging upward into the sky, a marsh hawk, buoyant and gleaming silvery in the sun. Over the trees he beat, circled once, and disappeared.

The hens were still flapping for safety in a dozen directions, but the gray harrier had gone. A bolt of lightning could hardly have dropped so unannounced, could hardly have vanished so completely, could scarcely have killed so quickly. I ran to the pullet, but found her dead. The harrier's stroke, delivered with fearful velocity, had laid head and neck open as with a keen knife. Yet a little slower and he would have missed, for the pullet warded off the other claw with her wing. The gripping talons slipped off the long quills, and the hawk swept on without his quarry. He dared not come back for it at my feet; so, with a single turn above the woods he was gone.

The scurrying hens stopped to look about them.

There was nothing in the sky to see. They stood still and silent a moment. The rooster *chucked.* Then one by one they turned back into the open pasture. A huddled group under the hen-yard fence broke up and came out with the others. Death had flashed among them, but had missed *them.* Fear had come, but it had gone. Within two minutes from the fall of the stroke, every hen in the flock was intent at her scratching, or as intently chasing the gray grasshoppers over the pasture.

Yet, as the flock scratched, the high-stepping cock would frequently cast up his eye toward the tree-tops; would sound his alarum at the flight of a robin; and if a crow came over, he would shout and dodge and start to run. But instantly the shadow would pass, and instantly Chanticleer —

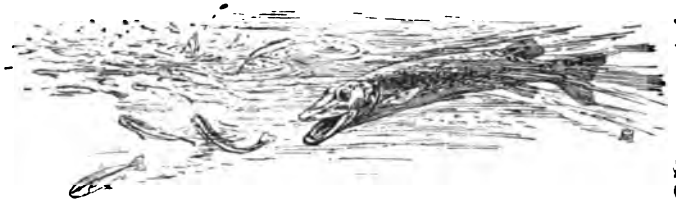
> "He looketh as it were a grym leoun,
> And on hise toos he rometh up and doun;
> . . . . . .
> Thus roial as a prince is in an halle."

He was n't afraid. Cautious, alert, watchful he was, but not afraid. No shadow of dread lay dark and ominous across the sunshine of his pasture. Shadows came — like a flash; and like a flash they vanished away.

We cannot go far into the fields without sighting the hawk and the snake, whose other names are Death. In one form or another Death moves everywhere, down every wood-path and pasture-lane,

through the black waters of the mill-pond, out under the open of the April sky, night and day, and every day, the four seasons through.

I have seen the still surface of a pond break suddenly with a swirl, and flash a hundred flecks of silver into the light, as the minnows leap from the



jaws of the terrible pike. Then a loud rattle, a streak of blue, a splash at the centre of the swirl, and I see the pike twisting and bending in the beak of the terrible kingfisher. The killer is killed. But at the mouth of the nest-hole in the steep sand-bank, swaying from a root in the edge of the turf above, hangs the terrible black snake, the third killer; and the belted kingfisher, dropping the pike, darts off with a startled cry.

I have been afield at times when one tragedy has followed another in such rapid and continuous succession as to put a whole shining, singing, blossoming springtime under a pall. Everything has seemed to cower, skulk, and hide, to run as if pursued. There was no peace, no stirring of small life, not even in the quiet of the deep pines; for here a hawk would be nesting, or a snake would be sleeping, or

I would hear the passing of a fox, see perhaps his keen, hungry face an instant as he halted, winding me.

There is struggle, and pain, and death in the woods, and there is fear also, but the fear does not last long; it does not haunt and follow and terrify; it has no being, no shape, no lair. The shadow of the swiftest scudding cloud is not so fleeting as this Fear-shadow in the woods. The lowest of the animals seem capable of feeling fear; yet the very highest of them seem incapable of dreading it. For them Fear is not of the imagination, but of the sight, and of the passing moment.

"The present only toucheth thee!"

It does more, it throngs him — our little fellow mortal of the stubble-field. Into the present is lived the whole of his life — he remembers none of it; he anticipates none of it. And the whole of this life is action; and the whole of this action is joy. The moments of fear in an animal's life are few and vanishing. Action and joy are constant, the joint laws of all animal life, of all nature — of the shining stars that sing together, of the little mice that squeak together, of the bitter northeast storms that roar across the wintry fields.

I have had more than one hunter grip me excitedly, and with almost a command bid me hear the music of the baying pack. There are hollow halls in the

swamps that lie to the east and north and west of me, that catch up the cry of the foxhounds, that blend it, mellow it, round it, and roll it, rising and falling over the meadows in great globes of sound, as pure and sweet as the pearly notes of the veery rolling round their silver basin in the summer dusk.

What music it is when the pack breaks into the open on the warm trail! A chorus then of tongues singing the ecstasy of pursuit! My blood leaps; the natural primitive wild thing of muscle and nerve and instinct within me slips its leash, and on past with the pack I drive, the scent of the trail single and sweet in my nostrils, a very fire in my blood, motion, motion, motion in my bounding muscles, and in my being a mighty music, spheric and immortal!

"The fair music that all creatures made
To their great Lord, whose love their motions swayed . . ."

But what about the fox, loping wearily on ahead? What part has he in the chorus? No part, perhaps, unless we grimly call him its conductor. But the point is the chorus — that it never ceases, the hounds at this moment, not the fox, in the leading rôle.

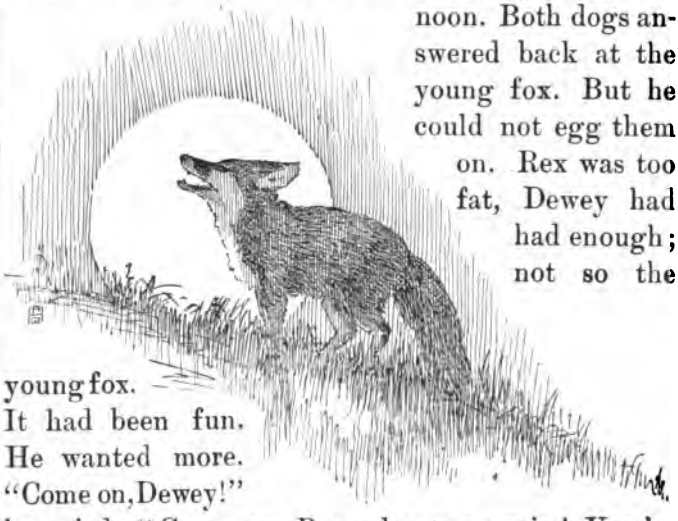
"But the chorus ceases for me," you say. "My heart is with the poor fox." So is mine, and mine is with the dogs too. No, don't say "Poor little fox!" For many a night I have bayed with the pack, and as often — oftener, I think — I have loped and dodged and doubled with the fox, pitting limb against limb, lung against lung, wit against wit, and always escap-

ing. More than once, in the warm moonlight, I, the fox, have led them on and on, spurring their lagging muscles with a sight of my brush, on and on, through the moonlit night, through the day, on into the moon again, and on until — only the stir of my own footsteps has followed me. Then, doubling once more, creeping back a little upon my track, I have looked at my pursuers, silent and stiff upon the trail, and, ere the echo of their cry has died away, I have caught up the chorus and carried it single-throated through the wheeling, singing spheres.

There is more of fact than of fancy to this. That a fox ever purposely led a dog to run to death would be hard to prove; but that the dogs run themselves to death in a single extended chase after a single fox is a common occurrence here in the woods about the farm. Occasionally the fox may be overtaken by the hounds; seldom, however, except in the case of a very young one or of one unacquainted with the lay of the land, a stranger that may have been driven into the rough country here.

I have been both fox and hound; I have run the race too often not to know that both enjoy it at times, fox as much as hound. Some weeks ago the dogs carried a young fox around and around the farm, hunting him here, there, everywhere, as if in a game of hide-and-seek. An old fox would have led the dogs on a long coursing run across the range. But the young fox, after the dogs were caught and

taken off the trail, soon sauntered up through the mowing-field behind the barn, came out upon the bare knoll near the house, and sat there in the moonlight yapping down at Rex and Dewey, the house-dogs in the two farms below. Rex is a Scotch collie, Dewey a dreadful mix of dog-dregs. He had been tail-ender in the pack for a while during the afternoon. Both dogs answered back at the young fox. But he could not egg them on. Rex was too fat, Dewey had had enough; not so the young fox.



It had been fun. He wanted more. "Come on, Dewey!" he cried. "Come on, Rex, play tag again! You're still 'it.'"

I was at work with my chickens one spring day when the fox broke from cover in the tall woods, struck the old wagon-road along the ridge, and came at a gallop down behind the hen-coops, with five hounds not a minute behind. They passed with a crash and were gone — up over the ridge and down

into the east swamp. Soon I noticed that the pack had broken, deploying in every direction, beating the ground over and over. Reynard had given them the slip — on the ridge-side, evidently, for there were no cries from below in the swamp.

Leaving my work at noon, I went down to restake my cow in the meadow. I had just drawn her chain-pin when down the road through the orchard behind me came the fox, hopping high up and down, his neck stretched, his eye peeled for poultry. Spying a white hen of my neighbor's, he made for her, clear to the barnyard wall. Then, hopping higher for a better view, he sighted another hen in the front yard, skipped in gayly through the fence, seized her, and loped across the road and away up the birch-grown hills beyond.

The dogs had been at his very heels ten minutes before. He had fooled them. And no doubt he had done it again and again. They were even now yelping at the end of the baffling trail behind the ridge. Let them yelp. It is a kind and convenient habit of dogs, this yelping, one can tell so exactly where they are. Meantime one can take a turn for one's self at the chase, get a bite of chicken, a drink of water, a wink or two of rest, and when the yelping gets warm again, one is quite ready to pick up one's heels and lead the pack another merry dance. The fox is quite a jolly fellow.

This is the way the races out of doors are all run

off. Now and then they may end tragically. A fox cannot reckon on the hunter with a gun. He is racing against the pack of hounds. But, mortal finish or no, the spirit of the chase is neither rage nor terror, but the excitement of a matched game, the ecstasy of pursuit for the hound, the passion of escape for the fox, without fury or fear — except for the instant at the start and at the finish — when it is a finish.

This is the spirit of the chase — of the race, more truly; for it is always a race, where the stake is not life and death, but rather the joy of winning. The hound cares as little for his own life as for the life of the fox he is hunting. It is the race, instead, that he loves; it is the moments of crowded, complete, supreme existence for him — "glory" we call it when men run it off together. Death, and the fear of death, the animals can neither understand nor feel. Only enemies exist in the world out of doors, only hounds, foxes, hawks — they, and their scents, their sounds and shadows; and not fear, but readiness only. The level of wild life, of the soul of all nature, is a great serenity. It is seldom lowered, but often raised to a higher level, intenser, faster, more exultant.

The serrate pines on my horizon are not the pickets of a great pen. My fields and swamps and ponds are not one wide battle-field, as if the only work of my wild neighbors were bloody war, and the whole of their existence a reign of terror. This

is a universe of law and order and marvelous balance; conditions these of life, of normal, peaceful, joyous life. Life and not death is the law; joy and not fear is the spirit, is the frame of all that breathes, of very matter itself.

"And ever at the loom of Birth
The Mighty Mother weaves and sings;
She weaves — fresh robes for mangled earth;
She sings — fresh hopes for desperate things."

But suppose the fox were a defenseless rabbit, what of fear and terror then?

Ask any one who has shot in the rabbity fields of southern New Jersey. The rabbit seldom runs in blind terror. He is soft-eyed, and timid, and as gentle as a pigeon, but he is not defenseless. A nobler set of legs was never bestowed by nature than the little cottontail's. They are as wings compared with the bent, bow legs that bear up the ordinary rabbit-hound. With winged legs, protecting color, a clear map of the country in his head, — its stumps, rail-piles, cat-brier tangles, and narrow rabbit-roads, — with all this as a handicap, Bunny may well run his usual cool and winning race. The balance is just as even, the chances quite as good, and the contest every bit as interesting to him as to Reynard.

I have seen a rabbit squat close in his form and let a hound pass yelping within a few feet of him, but waiting on his toes as ready as a hair-trigger should he be discovered.

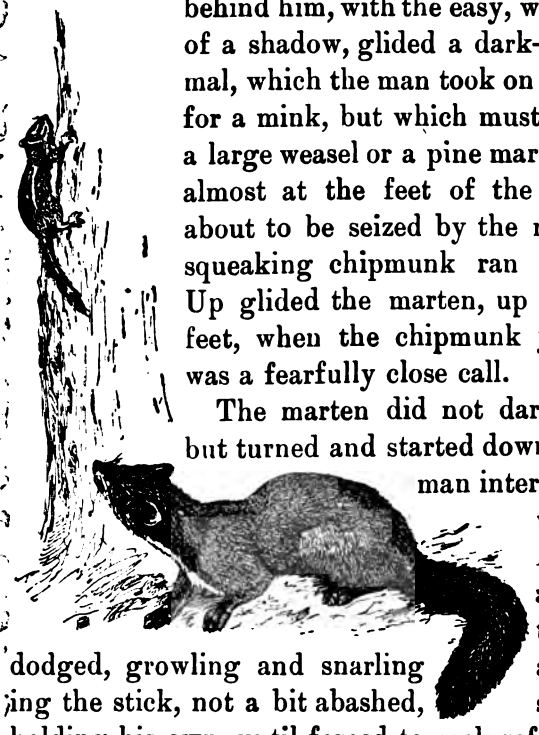
I have seen him leap for his life as the dog sighted him, and, bounding like a ball across the stubble, disappear in the woods, the hound within two jumps of his flashing tail. I have waited at the end of the wood-road for the runners to come back, down the home-stretch, for the finish. On they go through the woods, for a quarter, or perhaps a half a mile, the baying of the hound faint and intermittent in the distance, then quite lost. No, there it is again, louder now. They have turned the course.

I wait.

The quiet life of the woods is undisturbed; for the voice of the hound is only an echo, not unlike the far-off tolling of a slow-swinging bell. The leaves stir as a wood mouse scurries from his stump; an acorn rattles down; then in the winding wood-road I hear the *pit-pat, pit-pat*, of soft furry feet, and there at the bend is the rabbit. He stops, rises high up on his haunches, and listens. He drops again upon all fours, scratches himself behind the ear, reaches over the cart-rut for a nip of sassafras, hops a little nearer, and throws his big ears forward in quick alarm, for he sees me, and, as if something had exploded under him, he kicks into the air and is off, — leaving a pretty tangle for the dog to unravel, later on, by this mighty jump to the side.

My children and a woodchopper were witnesses recently of an exciting, and, for this section of Massachusetts, a novel race, which, but for them, must

certainly have ended fatally. The boys were coming through the wood-lot where the man was chopping, when down the hillside toward them rushed a little chipmunk, his teeth a-chatter with terror; for close behind him, with the easy, wavy motion of a shadow, glided a dark-brown animal, which the man took on the instant for a mink, but which must have been a large weasel or a pine marten. When almost at the feet of the boys, and about to be seized by the marten, the squeaking chipmunk ran up a tree. Up glided the marten, up for twenty feet, when the chipmunk jumped. It was a fearfully close call.



The marten did not dare to jump, but turned and started down, when the man intercepted him with a stick. Around and around the tree he dodged, growling and snarling and avoiding the stick, not a bit abashed, stubbornly holding his own, until forced to seek refuge among the branches. Meanwhile, the terrified chipmunk had recovered his nerve and sat quietly watching the sudden turn of affairs from a near-by stump.

I frequently climb into the cupola of the barn

during the winter, and bring down a dazed junco that would beat his life out up there against the window-panes. He will lie on his back in my open hand, either feigning death or really powerless with fear. His eyes will close, his whole tiny body throb convulsively with his throbbing heart. Taking him to the door, I will turn him over and give him a gentle toss. Instantly his wings flash; they take him zigzag for a yard or two, then bear him swiftly round the corner of the house and drop him in the midst of his fellows, where they are feeding upon the lawn. He will shape himself up a little and fall to picking with the others.

From a state of collapse the laws of his being bring the bird into normal behavior as quickly and completely as the collapsed rubber ball is rounded by the laws of its being. The memory of the fright seems to be an impression exactly like the dent in the rubber ball — as if it had never been.

Memories, of course, the animals surely have; but little or no power to use them. The dog will sometimes seem to cherish a grudge; so will the elephant. Some one injures or wrongs him, and the huge beast harbors the memory, broods it, and awaits his opportunity for revenge. Yet the records of these cases usually show that the creature had been living with the object of his hatred — his keeper, perhaps — and that the memory goes no farther back than the present moment, than the sight of the hated one.

At my railroad station I frequently see a yoke of great sleepy, bald-faced oxen, that look as much alike as two blackbirds. Their driver knows them apart; but as they stand there, bound to one another by the heavy bar across their foreheads, it would puzzle anybody else to tell Buck from Berry. But not if he approach them wearing an overcoat. At sight of me in an overcoat the off ox will snort and back and thrash about in terror, twisting the head of his yoke-fellow, nearly breaking his neck, and trampling him miserably. But the nigh ox is used to it. He chews and blinks away placidly, keeps his feet the best he can, and does n't try to understand at all why greatcoats should so frighten his cud-chewing brother. I will drop off my coat and go up immediately to smooth the muzzles of both oxen, now blinking sleepily while the lumber is being loaded on.

Years ago, the driver told me, the off ox was badly frightened by a big woolly coat, the sight or smell of which probably suggested to the creature some natural enemy, a panther, perhaps, or a bear. The memory remained, but beyond recall except in the presence of its first cause, the greatcoat.

To us there are such things as terror and death, but not to the lower animals except momentarily. We are clutched by terror even as the junco was clutched in my goblin hand. When the mighty fingers open, we zigzag, dazed, from the danger; but

fall to planning before the tremors of the fright have ceased. Upon the crumbled, smoking heap of San Francisco a second splendid city has arisen and shall ever rise. Terror can kill the living, but it cannot hinder them from forgetting, or prevent them from hoping, or, for more than an instant, stop them from doing. Such is the law of life — the law of heaven, of my pastures, of the little junco, of myself. Life, Law, and Matter are all of one piece. The horse in my stable, the robin, the toad, the beetle, the vine in my garden, the garden itself, and I together with them all, come out of the same divine dust; we all breathe the same divine breath; we have our beings under the same divine laws; only they do not know that the law, the breath, and the dust are divine. If, with all that I know of fear, I can so readily forget it, and can so constantly feel the hope and the joy of life within me, how soon for them, my lowly fellow mortals, must vanish all sight of fear, all memory of pain! And how abiding with them, how compelling, the necessity to live! And in their unquestioning obedience, what joy!

The face of the fields is as changeful as the face of a child. Every passing wind, every shifting cloud, every calling bird, every baying hound, every shape, shadow, fragrance, sound, and tremor, are reflected there. But if time and experience and pain come, they pass utterly away; for the face of the fields does not grow old or wise or seamed with pain. It is always the

face of a child, — asleep in winter, awake in spring and summer, — a face of life and health always, as much in the falling leaf as in the opening bud, as much under the covers of the snow as in the greensward of the spring, as much in the wild, fierce joy of fox and hound as they course the turning, tangling paths of the woodlands in their fateful race as in the song of brook and bird on a joyous April morning.

CHAPTER IX

THE BUZZARD OF THE BEAR SWAMP

NO, I do not believe that any one of you ever went into a swamp to find a turkey buzzard's nest. Still, if you had been born on the edge of a great swamp, as I was, and if the great-winged buzzards had been soaring, soaring up in your sky, as all through my boyhood they were soaring up in mine, then why should you not have gone some time into the swamp to see where they make their nests — these strange cloud-winged creatures?

Boys are boys, and girls are girls, the world over; and I am pretty sure that little Jack Horner and myself were not the only two boys in all the world to do great and wonderful deeds. Any boy with a love for birds and a longing for the deep woods, living close to the edge of the Bear Swamp, would have searched out that buzzard's nest.

Although I was born within the shadows of the Bear Swamp, close enough to smell the magnolias along its margin, and lived my first ten years only a little farther off, yet it was not until after twice ten years of absence that I stood again within sight

of it, ready for the first time to cross its dark borders and find the buzzard's nest.

Now here at last I found myself, looking down over the largest, least trod, deepest-tangled swamp in southern New Jersey — wide, gloomy, silent, and to me, — for I still thought of it as I used to when a child, — to me, a mysterious realm of black streams, hollow trees, animal trails, and haunting shapes, presided over by this great bird, the turkey buzzard.

For he was never mere bird to me, but some kind of spirit. He stood to me for what was far off, mysterious, secret, and unapproachable in the deep, dark swamp; and, in the sky, so wide were his wings, so majestic the sweep of his flight, he had always stirred me, caused me to hold my breath and wish myself to fly.

No other bird did I so much miss from my New England skies when I came here to live. Only the other day, standing in the heart of Boston, I glanced up and saw, sailing at a far height against the billowy clouds, an aeroplane; and what should I think of but the flight of the vulture, so like the steady wings of the great bird seemed the steady wings of this great monoplane far off against the sky.

And so you begin to understand why I had come back after so many years to the swamp, and why I wanted to see the nest of this strange bird that had been flying, flying forever in my imagination and in my sky. But my good uncle, whom I was visit-

ing, when I mentioned my quest, merely exclaimed, "What in thunderation!"

You will find a good many uncles and other folk who won't understand a good many things that you want to do. Never mind. If you want to see a buzzard's nest, let all your relations exclaim while you go quietly off alone and see it.

I wanted to find a buzzard's nest—the nest of the Bear Swamp buzzard; and here at last I stood; and yonder on the clouds, a mere mote in the distance, floated the bird. It was coming toward me over the wide reach of the swamp.

Silent, inscrutable, and alien lay the swamp, and untouched by human hands. Over it spread a quiet and reserve as real as twilight. Like a mask it was worn, and was slipped on, I know, at my approach. I could feel the silent spirit of the place drawing back away from me. But I should have at least a guide to lead me through the shadow land, for out of the lower living green towered a line of limbless stubs, like a line of telegraph-poles, their bleached bones gleaming white, or showing dark and gaunt against the horizon, and marking for me a path far out across the swamp. Besides, here came the buzzard winding slowly down the clouds. Soon its spiral changed to a long pendulum-swing, till just above the skeleton trees the great bird wheeled and, bracing itself with its flapping wings, dropped heavily upon one of the headless tree-trunks.

It had come leisurely, yet I could see that it had come with a directness and purpose that was unmistakable and also meaningful. It had discovered me in the distance, and, while still invisible to my eyes, had started down to perch upon that giant stub in order to watch me. It was suspicious, and had come to watch me, because somewhere beneath its perch, I felt sure, lay a hollow log, the creature's den, holding its two eggs or its young. A buzzard has something like a soul.

Marking the direction of the stub, and its probable distance, I waded into the deep underbrush, the buzzard perched against the sky for my guide, and, for my quest, the stump or hollow log that held the creature's nest.

The rank ferns and ropy vines swallowed me up, and shut out at

times even the sight of the sky and the buzzard. It was not until half an hour's struggle that, climbing a pine-crested swell in the low bottom, I sighted the bird again. It had not moved.

I was now in the real swamp, the old uncut forest. It was a land of tree giants: huge tulip poplar and swamp white oak, so old that they had become solitary, their comrades having fallen one by one; while some of them, unable to loose their grip upon the soil, which had widened and tightened through centuries, were still standing, though long since dead. It was upon one of these that the buzzard sat humped.

Directly in my path stood an ancient swamp white oak, the greatest tree, I think, that I have ever seen. It was not the highest, nor the largest round, perhaps, but in years and looks the greatest. Hoary, hollow, and broken-limbed, his huge bole seemed encircled with the centuries.

"For it had bene an auncient tree,
Sacred with many a mysteree."

Above him to twice his height loomed a tulip poplar, clean-boled for thirty feet and in the top all green and gold with blossoms. It was a resplendent thing beside the oak, yet how unmistakably the gnarled old monarch wore the crown! His girth more than balanced the poplar's greater height; and, as for blossoms, he had his tiny-flowered catkins; but nature knows the beauty of strength and inward majesty, and has pinned no boutonnière upon the oak.

My buzzard now was hardly more than half a mile away, and plainly seen through the rifts in the lofty timbered roof above me. As I was nearing the top of a large fallen pine that lay in my course, I was startled by the *burrh! burrh! burrh!* of three partridges taking wing just beyond, near the foot of the tree. Their exploding flight seemed all the more like a real explosion when three little clouds of dust-smoke rose out of the low, *wet* bottom of the swamp and drifted up against the green.

Then I saw an interesting sight. The pine, in its fall, had snatched with its wide-reaching, multitudinous roots at the shallow bottom and torn out a giant fistful of earth, leaving a hole about two feet deep and more than a dozen feet wide. The sand thus lifted into the air had gradually washed down into a mound on each side of the butt, where it lay high and dry above the level of the wet swamp. This the swamp birds had turned into a great dust-bath. It was in constant use, evidently. Not a spear of grass had sprouted in it, and all over it were pits and craters of various sizes, showing that not only the partridges but also the quail and such small things as the warblers bathed here,—though I can't recall ever having seen a warbler bathe in the dust. A dry bath in the swamp was something of a luxury, evidently. I wonder if the buzzards used it?

I went forward cautiously now, and expectantly, for I was close enough to see the white beak and

red wattled neck of my buzzard guide. The buzzard saw me, too, and began to twist its head and to twitch its wing-tips nervously. Then the long, black wings began to open, as you would open a two-foot rule, and, with a heavy lurch that left the dead stub rocking, the bird dropped and was soon soaring high up in the blue.

This was the locality of the nest; now where should I find it? Evidently I was to have no further help from the old bird. The underbrush was so thick that I could hardly see farther than my nose. A half-rotten tree-trunk lay near, the top end resting across the backs of several saplings that it had borne down in its fall. I crept up on this for a look around, and almost tumbled off at finding myself staring directly into the dark, cavernous hollow of an immense log lying on a slight rise of ground a few feet ahead of me.

It was a yawning hole, which at a glance I knew belonged to the buzzard. The log, a mere shell of a mighty white oak, had been girdled and felled with an axe, by coon-hunters probably, and still lay with one side resting upon the rim of the stump. As I stood looking, something white stirred vaguely in the hole and disappeared.

Leaping from my perch, I scrambled forward to the mouth of the hollow log and was greeted with hisses from far back in the dark. Then came a thumping of bare feet, more hisses, and a sound of snapping beaks. I had found my buzzard's nest!

YOUNG TURKEY BUZZARD

Hardly that, either, for there was not a feather, stick, or chip as evidence of a nest. The eggs had been laid upon the sloping cavern floor, and in the course of their incubation must have rolled clear down to the opposite end, where the opening was so narrow that the buzzard could not have brooded them until she had rolled them back. The wonder is that they had ever hatched.

But they had, and what they hatched was another wonder. Nature never intended a young buzzard for any eye but his mother's, and *she* hates the sight of him. Elsewhere I have told of a buzzard that devoured her eggs at the approach of an enemy, so delicately balanced are her unnamable appetites and her maternal affections!

The two strange nestlings in the log must have been three weeks old, I should say, the larger weighing about four pounds. They were covered, as young owls are, with deep snow-white down, out of which protruded their black scaly, snaky legs. They stood braced on these long black legs, their receding heads drawn back, shoulders thrust forward, and bodies humped between the featherless wings like challenging tom-cats.

In order to examine them, I crawled into the den —not a difficult act, for the opening measured four feet and a half across at the mouth. The air was musty inside, yet surprisingly free from odor. The floor was absolutely clean, but on the top and sides

of the cavity was a thick coating of live mosquitoes, most of them gorged, hanging like a red-beaded tapestry over the walls.

I had taken pains that the flying buzzard should not see me enter, for I hoped she would descend to look after her young. But she would take no chances with herself. I sat near the mouth of the hollow, where I could catch the fresh breeze that pulled across the end, and where I had a view of a far-away bit of sky. Suddenly, across this field of blue, there swept a meteor of black—the buzzard! and evidently in that instant of passage, at a distance certainly of half a mile, she spied me in the log.

I waited more than an hour longer, and when I tumbled out with a dozen kinds of cramps, the unworried mother was soaring serenely far up in the clear, cool sky.

CHAPTER X

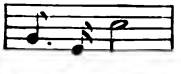
A CHAPTER OF THINGS TO HEAR THIS SPRING

I

THE frogs! You can have no spring until you hear the frogs. The first shrill notes, heard before the ice is fairly out of the marshes, will be the waking call of the hylas, the tiny tree-frogs that later on in the summer you will find in the woods. Then, as the spring advances and this silvery sleigh-bell jingle tinkles faster, other voices will join in — the soft croak of the spotted leopard frogs, the still softer melancholy quaver of the common toad, and away down at the end of the scale the deep, solemn bass of the great bullfrog saying, "Go round! Better go round!"

II

You must hear, besides the first spring notes of the bluebird and the robin, four bird songs this spring. First (1) the song of the wood thrush or the hermit thrush, whichever one lives in your neighborhood. No words can describe the purity, the peacefulness, the spiritual quality of the wood thrush's simple



"Come to me." It is the voice of the tender twilight, the voice of the tran-

quil forest, speaking to you. After the thrush (2) the brown thrasher, our finest, most gifted songster,

as great a singer, I think (and I have often heard them both), as the Southern mockingbird. Then (3) the operatic catbird. She sits lower down among the bushes than the brown thrasher, as if she knew that, compared with him, she must take a back seat; but for variety of notes and length of song, she has few rivals. I say *she*, when really I ought to say *he*, for it is the males of most birds that sing, but the catbird seems so long and slender, so dainty and feminine, that I think of this singer as of some exquisite operatic singer in a woman's rôle. Then (4) the bobolink; for his song is just like Bryant's bubbling poem, only better! Go to the meadows in June and

listen as he comes lilting and singing over your head.

III

There are some birds that cannot sing: the belted kingfisher, for instance; he can only rattle. You must hear him rattle. You can do as well yourself if you will shake a "pair of bones" or heave an anchor and let the chain run fast through the hawse-hole. You then must hear the downy woodpecker doing his rattling *rat-ta-tat-tat-tat-tat* (across the page and back again), as fast as *rat-ta-tat* can *tat*. How he makes the old dead limb or fence-post rattle as he drums upon it with his chisel bill. He can be heard half a mile around.

Then high-hole, the flicker (or golden-winged woodpecker), you must hear him yell, *Up-up-up-up-up up-up-up-up-up-up*, — a ringing, rolling, rapid kind of yodel that echoes over the spring fields.

IV

You must hear the nighthawk and the whip-poor-will. Both birds are to be heard at twilight, and the whip-poor-will far into the night. At the very break of dawn is also a good time to listen to them.

At dusk you will see (I have seen him from the city roofs in Boston) a bird about the size of a pigeon mounting up into the sky by short flights, crying *peent*, until far over your head the creature will suddenly turn and on half-closed wings dive headlong

toward the earth, when, just before hitting the ground, upward he swoops, at the same instant making a weird booming sound, a kind of hollow groan with his wings, as the wind rushes through their large feathers. This diver through the dim ocean of air is the nighthawk. Let one of the birds dive close to your head on a lonely dusky road, and your hair will try to jump out from under your hat.

The whip-poor-will's cry you all know. When you hear one this spring, go out into the twilight and watch for him. See him spring into the air, like a strange shadow, for flies; count his *whip-poor-wills* (he may call it more than a hundred times in as many seconds!). But hear a circle of the birds, if possible, calling through the darkness of a wood all around you!

V

There is one strange bird song that is half song and half dance that perhaps most of you may never be able to hear and see; but as it is worth going miles to hear, and nights of watching to witness, I am going to set it here as one of your outdoor tasks or feats: you must hear the mating song of the woodcock. I have described the song and the dance in "Roof and Meadow," in the chapter called "One Flew East and One Flew West." Mr. Bradford Torrey has an account of it in his "Clerk of the Woods," in the chapter named "Woodcock Vespers." To hear the

song is a rare experience for the habitual watcher in the woods, but one that you might have the first April evening that you are abroad.

Go down to your nearest meadow — a meadow near a swampy piece of woods is best — and here, along the bank of the meadow stream, wait in the chilly twilight for the *speank, speank,* or the *peent, peent,* from the grass — the signal that the song is about to begin.

VI

One of the dreadful — positively dreadful — sounds of the late spring that I hear day in and day out is the gobbling, strangling, ghastly cries of young crows feeding. You will surely think something is being murdered. The crying of a hungry baby is musical in comparison. But it is a good sound to hear, for it reminds one of the babes in the woods — that a new generation of birds is being brought through from babyhood to gladden the world. It is a tender sound! The year is still young.

VII

You should hear the hum of the honey-bees on a fresh May day in an apple tree that is just coming into perfect bloom. The enchanting loveliness of the pink and white world of blossoms is enough to make one forget to listen to the *hum-hum-hum-*

humming-ing-ing-ing-ing of the excited bees. But hear their myriad wings, fanning the perfume into the air and filling the sunshine with the music of work. The whir, the hum of labor — of a busy factory, of a great steamship dock — is always music to those who know the blessedness of work; but it takes that knowledge, and a good deal of imagination besides, to hear the music in it. Not so with the bees. The season, the day, the colors, and perfumes — they are the song; the wings are only the million-stringed æolian upon which the song is played.

VIII

You should hear the grass grow. What! I repeat, you should hear the grass grow. I have a friend, a sound and sensible man, but a lover of the out-of-doors, who says he can hear it grow. But perhaps it is the soft stir of the working earthworms that he hears. Try it. Go out alone one of these April nights; select a green pasture with a slope to the south, at least a mile from any house, or railroad; lay your ear flat upon the grass, listen without a move for ten minutes. You hear something — or do you feel it? Is it the reaching up of the grass? is it the stir of the earthworms? is it the pulse of the throbbing universe? or is it your own throbbing pulse? It is all of these, I think; call it the heart of the grass beating in every tiny living blade, if you wish to. You should listen to hear the grass grow.

IX

The fires have gone out on the open hearth. Listen early in the morning and toward evening for the rumbling, the small, muffled thunder, of the chimney swallows, as they come down from the open sky on their wonderful wings. Don't be frightened. It is n't Santa Claus this time of year; nor is it the Old Nick! The smothered thunder is caused by the rapid beating of the swallows' wings on the air in the narrow chimney-flue, as the birds settle down from the top of the chimney and hover over their nests. Stick your head into the fireplace and look up! Don't smoke the precious lodgers out, no matter how much racket they make.

X

Hurry out while the last drops of your first May thunder-shower are still falling and listen to the robins singing from the tops of the trees. Their liquid songs are as fresh as the shower, as if the raindrops in falling were running down from the trees in song — as indeed they are in the overflowing trout-brook. Go out and listen, and write a better poem than this one that I wrote the other afternoon when listening to the birds in our first spring shower: —

The warm rain drops aslant the sun
And in the rain the robins sing;
Across the creek in twos and troops,
The hawking swifts and swallows wing.

The air is sweet with apple bloom,
And sweet the laid dust down the lane,
The meadow's marge of calamus,
And sweet the robins in the rain.

O greening time of bloom and song!
O fragrant days of tender pain!
The wet, the warm, the sweet young days
With robins singing in the rain.

CHAPTER XI

TURTLE EGGS FOR AGASSIZ

I TOOK down, recently, from the shelves of a great public library, the four volumes of Agassiz's "Contributions to the Natural History of the United States." I doubt if anybody but the charwoman, with her duster, had touched those volumes for twenty-five years. They are a monumental work, the fruit of vast and heroic labors, with colored plates on stone, showing the turtles of the United States, and their life-history. The work was published more than half a century ago, but it looked old beyond its years — massive, heavy, weathered, as if dug from the rocks; and I soon turned with a sigh from the weary learning of its plates and diagrams to look at the preface.

Then, reading down through the catalogue of human names and of thanks for help received, I came to a sentence beginning: —

"In New England I have myself collected largely; but I have also received valuable contributions from the late Rev. Zadoc Thompson of Burlington; . . . from Mr. D. Henry Thoreau of Concord; . . . and from Mr. J. W. P. Jenks of Middleboro'." And then it hastens on with the thanks in order to get to the

turtles, as if turtles were the one and only thing of real importance in all the world.

Turtles are important — interesting; so is the late Rev. Zadoc Thompson of Burlington. Indeed any reverend gentleman who would catch turtles for Agassiz must have been interesting. If Agassiz had only put a chapter into his turtle book about him! and as for the Mr. Jenks of Middleboro' (at the end of the quotation) I know that he was interesting; for years later, he was an old college professor of mine. He told me some of the particulars of his turtle contributions, particulars which Agassiz should have found a place for in his big book. The preface says merely that this gentleman sent turtles to Cambridge by the thousands — brief and scanty recognition. For that is not the only thing this gentleman did. On one occasion he sent, not turtles, but turtle *eggs* to Cambridge — *brought* them, I should say; and all there is to show for it, so far as I could discover, is a small drawing of a bit of one of the eggs!

Of course, Agassiz wanted to make that drawing, and had to have a *fresh* turtle egg to draw it from. He had to have it, and he got it. A great man, when he wants a certain turtle egg, at a certain time, always gets it, for he gets some one else to get it for him. I am glad he got it. But what makes me sad and impatient is that he did not think it worth while to tell us about the getting of it.

It would seem, naturally, that there could be noth-

ing unusual or interesting about the getting of turtle eggs when you want them. Nothing at all, if you should chance to want the eggs as you chance to find them. So with anything else. But if you want turtle eggs *when* you want them, and are bound to have them, then you must — get Mr. Jenks, or somebody else to get them for you.

Agassiz wanted those turtle eggs when he wanted them — not a minute over three hours from the minute they were laid. Yet even that does not seem exacting, hardly more difficult than the getting of hens' eggs only three hours old. Just so, provided the professor could have had his private turtle-coop in Harvard College Yard; and provided he could have made his turtles lay. But turtles will not respond, like hens, to meat-scraps and the warm mash. The professor's problem was not to get from a mud turtle's nest in the back yard to his work-table in the laboratory; but to get from the laboratory in Cambridge to some pond when the turtles were laying, and back to the laboratory within the limited time. And this might have called for nice and discriminating work — as it did.

Agassiz had been engaged for a long time upon his "Contributions." He had brought the great work nearly to a finish. It was, indeed, finished but for one small yet very important bit of observation: he had carried the turtle egg through every stage of its development with the single exception of one —

the very earliest. That beginning stage had brought the "Contributions" to a halt. To get eggs that were fresh enough to show the incubation at this period had been impossible.

There were several ways that Agassiz might have proceeded: he might have got a leave of absence for the spring term, taken his laboratory to some pond inhabited by turtles, and there camped until he should catch the reptile digging out her nest. But there were difficulties in all of that—as those who are college professors and naturalists know. As this was quite out of the question, he did the easiest thing — asked Mr. Jenks of Middleboro to get him the eggs. Mr. Jenks got them. Agassiz knew all about his getting of them; and I say the strange and irritating thing is, that Agassiz did not think it worth while to tell us about it, at least in the preface to his monumental work.

It was many years later that Mr. Jenks, then a gray-haired college professor, told me how he got those eggs to Agassiz.

"I was principal of an academy, during my younger years," he began, "and was busy one day with my classes, when a large man suddenly filled the doorway of the room, smiled to the four corners of the room, and called out with a big, quick voice that he was Professor Agassiz.

"Of course he was. I knew it, even before he had had time to shout it to me across the room.

"Would I get him some turtle eggs? he called. Yes, I would. And would I get them to Cambridge within three hours from the time they were laid? Yes, I would. And I did. And it was worth the doing. But I did it only once.

"When I promised Agassiz those eggs, I knew where I was going to get them. I had got turtle eggs there before — at a particular patch of sandy shore along a pond, a few miles distant from the academy.

"Three hours was the limit. From the railroad station to Boston was thirty-five miles; from the pond to the station was perhaps three or four miles; from Boston to Cambridge we called about three miles. Forty miles in round numbers! We figured it all out before he returned, and got the trip down to two hours, — record time: — driving from the pond to the station; from the station by express train to Boston; from Boston by cab to Cambridge. This left an easy hour for accidents and delays.

"Cab and car and carriage we reckoned into our time-table; but what we did n't figure on was the turtle." And he paused abruptly.

"Young man," he went on, his shaggy brows and spectacles hardly hiding the twinkle in the eyes that were bent severely upon me, "young man, when *you* go after turtle eggs, take into account the turtle. No! No! that 's bad advice. Youth never reckons on the turtle — and youth seldom ought to.

Only old age does that; and old age would never have got those turtle eggs to Agassiz.

"It was in the early spring that Agassiz came to the academy, long before there was any likelihood of the turtles' laying. But I was eager for the quest, and so fearful of failure that I started out to watch at the pond, fully two weeks ahead of the time that the turtles might be expected to lay. I remember the date clearly: it was May 14th.

"A little before dawn — along near three o'clock — I would drive over to the pond, hitch my horse near by, settle myself quietly among some thick cedars close to the sandy shore, and there I would wait, my kettle of sand ready, my eye covering the whole sleeping pond. Here among the cedars I would eat my breakfast, and then get back in good season to open the academy for the morning session.

"And so the watch began.

"I soon came to know individually the dozen or more turtles that kept to my side of the pond. Shortly after the cold mist would lift and melt away, they would stick up their heads through the quiet water; and as the sun slanted down over the ragged rim of tree-tops, the slow things would float into the warm lighted spots, or crawl out and doze comfortably on the hummocks and snags.

"What fragrant mornings those were! How fresh and new and unbreathed! The pond odors, the woods odors, the odors of the ploughed fields — of

water-lily, and wild grape, and the dew-laid soil! I can taste them yet, and hear them yet — the still, large sounds of the waking day — the pickerel breaking the quiet with his swirl; the kingfisher dropping anchor; the stir of feet and wings among the trees. And then the thought of the great book being held up for me! Those were rare mornings!

"But there began to be a good many of them, for the turtles showed no desire to lay. They sprawled in the sun, and never one came out upon the sand as if she intended to help on the great professor's book. The story of her eggs was of small concern to her; her contribution to the Natural History of the United States could wait.

"And it did wait. I began my watch on the 14th of May; June 1st found me still among the cedars, still waiting, as I had waited every morning, Sundays and rainy days alike. June 1st was a perfect morning, but every turtle slid out upon her log, as if egg-laying might be a matter strictly of next year.

"I began to grow uneasy, — not impatient yet, for a naturalist learns his lesson of patience early, and for all his years; but I began to fear lest, by some subtile sense, my presence might somehow be known to the creatures; that they might have gone to some other place to lay, while I was away at the schoolroom.

"I watched on to the end of the first week, on to the end of the second week in June, seeing the mists

rise and vanish every morning, and along with them vanish, more and more, the poetry of my early morning vigil. Poetry and rheumatism cannot long dwell together in the same clump of cedars, and I had begun to feel the rheumatism. A month of morning mists wrapping me around had at last soaked through to my bones. But Agassiz was waiting, and the world was waiting, for those turtle eggs; and I would wait. It was all I could do, for there is no use bringing a china nest-egg to a turtle; she is not open to any such delicate suggestion.

"Then came a mid-June Sunday morning, with dawn breaking a little after three: a warm, wide-awake dawn, with the level mist lifted from the level surface of the pond a full hour higher than I had seen it any morning before.

"This was the day. I knew it. I have heard persons say that they can hear the grass grow; that they know by some extra sense when danger is nigh. For a month I had been watching, had been brooding over this pond, and now I knew. I felt a stirring of the pulse of things that the cold-hearted turtles could no more escape than could the clods and I.

"Leaving my horse unhitched, as if he, too, understood, I slipped eagerly into my covert for a look at the pond. As I did so, a large pickerel ploughed a furrow out through the spatter-docks, and in his wake rose the head of a large painted turtle. Swinging slowly round, the creature headed straight for

the shore, and, without a pause, scrambled out on the sand.

"She was nothing unusual for a turtle, but her manner was unusual and the gait at which she moved; for there was method in it and fixed purpose. On she came, shuffling over the sand toward the higher open fields, with a hurried, determined see-saw that was taking her somewhere in particular, and that was bound to get her there on time.

"I held my breath. Had she been a dinosaurian making Mesozoic footprints, I could not have been more fearful. For footprints in the Mesozoic mud, or in the sands of time, were as nothing to me when compared with fresh turtle eggs in the sands of this pond.

"But over the strip of sand, without a stop, she paddled, and up a narrow cow-path into the high grass along a fence. Then up the narrow cow-path, on all fours, just like another turtle, I paddled, and into the high wet grass along the fence.

"I kept well within sound of her, for she moved recklessly, leaving a wide trail of flattened grass behind. I wanted to stand up, — and I don't believe I could have turned her back with a rail, — but I was afraid if she saw me that she might return indefinitely to the pond; so on I went, flat to the ground, squeezing through the lower rails of the fence, as if the field beyond were a melon-patch. It was nothing of the kind, only a wild, uncomfortable

"TAIL FIRST, BEGAN TO BURY HERSELF"

pasture, full of dewberry vines, and very discouraging. They were excessively wet vines and briery. I pulled my coat-sleeves as far over my fists as I could get them, and with the tin pail of sand swinging from between my teeth to avoid noise, I stumped fiercely, but silently, on after the turtle.

"She was laying her course, I thought, straight down the length of this dreadful pasture, when, not far from the fence, she suddenly hove to, warped herself short about, and came back, barely clearing me. I warped about, too, and in her wake bore down across the corner of the pasture, across the powdery public road, and on to a fence along a field of young corn.

"I was somewhat wet by this time, but not so wet as I had been before wallowing through the deep, dry dust of the road. Hurrying up behind a large tree by the fence, I peered down the corn-rows and saw the turtle stop, and begin to paw about in the loose, soft soil. She was going to lay!

"I held on to the tree and watched, as she tried this place, and that place, and the other place. But *the* place, evidently, was hard to find. What could a female turtle do with a whole field of possible nests to choose from? Then at last she found it, and, whirling about, she backed quickly at it and, tail first, began to bury herself before my staring eyes.

"Those were not the supreme moments of my life;

perhaps those moments came later that day; but those certainly were among the slowest, most dreadfully mixed of moments that I ever experienced. They were hours long. There she was, her shell just showing, like some old hulk in the sand alongshore. And how long would she stay there? and how should I know if she had laid an egg?

"I could still wait. And so I waited, when, over the freshly awakened fields, floated four mellow strokes from the distant town clock.

"Four o'clock! Why there was no train until seven! No train for three hours! The eggs would spoil! Then with a rush it came over me that this was Sunday morning, and there was no regular seven o'clock train, — none till after nine.

"I think I should have fainted had not the turtle just then begun crawling off. I was weak and dizzy; but there, there in the sand, were the eggs! and Agassiz! and the great book! Why, I cleared the fence — and the forty miles that lay between me and Cambridge — at a single jump! He should have them, trains or no. Those eggs should go to Agassiz by seven o'clock, if I had to gallop every mile of the way. Forty miles! Any horse could cover it in three hours, if he had to; and, upsetting the astonished turtle, I scooped out her long white eggs.

"On a bed of sand in the bottom of the pail I laid them, with what care my trembling fingers allowed; filled in between them with more sand; so

with layer after layer to the rim; and covering all smoothly with more sand, I ran back for my horse.

"That horse knew, as well as I, that the turtles had laid, and that he was to get those eggs to Agassiz. He turned out of that field into the road on two wheels, a thing he had not done for twenty years, doubling me up before the dashboard, the pail of eggs miraculously lodged between my knees.

"I let him out. If only he could keep this pace all the way to Cambridge! — or even halfway there, I would have time to finish the trip on foot. I shouted him on, holding to the dasher with one hand, holding the pail of eggs with the other, not daring to get off my knees, though the bang on them, as we pounded down the wood-road, was terrific. But nothing must happen to the eggs; they must not be jarred, or even turned over in the sand before they came to Agassiz.

"In order to get out on the pike it was necessary to drive back away from Boston toward the town. We had nearly covered the distance, and were rounding a turn from the woods into the open fields, when, ahead of me, at the station it seemed, I heard the quick, sharp whistle of a locomotive.

"What did it mean? Then followed the *puff, puff, puff*, of a starting train. But what train? Which way going? And jumping to my feet for a longer view, I pulled into a side road that paralleled the track, and headed hard for the station.

"We reeled along. The station was still out of sight, but from behind the bushes that shut it from view, rose the smoke of a moving engine. It was perhaps a mile away, but we were approaching, head on, and, topping a little hill, I swept down upon a freight train, the black smoke pouring from the stack, as the mighty creature pulled itself together for its swift run down the rails.

"My horse was on the gallop, following the track, and going straight toward the coming train. The sight of it almost maddened me — the bare thought of it, on the road to Boston! On I went; on it came, a half — a quarter of a mile between us, when suddenly my road shot out along an unfenced field with only a level stretch of sod between me and the engine.

"With a pull that lifted the horse from his feet, I swung him into the field and sent him straight as an arrow for the track. That train should carry me and my eggs to Boston!

"The engineer pulled the whistle. He saw me stand up in the rig, saw my hat blow off, saw me wave my arms, saw the tin pail swing in my teeth, and he jerked out a succession of sharp Halts! But it was he who should halt, not I; and on we went, the horse with a flounder landing the carriage on top of the track.

"The train was already grinding to a stop; but before it was near a standstill, I had backed off the

track, jumped out, and, running down the rails with the astonished engineers gaping at me, had swung aboard the cab.

"They offered no resistance; they had n't had time. Nor did they have the disposition, for I looked strange, not to say dangerous. Hatless, dew-soaked, smeared with yellow mud, and holding, as if it were a baby or a bomb, a little tin pail of sand!

"'Crazy,' the fireman muttered, looking to the engineer for his cue.

"I had been crazy, perhaps, but I was not crazy now.

"'Throw her wide open,' I commanded. 'Wide open! These are fresh turtle eggs for Professor Agassiz of Cambridge. He must have them before breakfast.'

"Then they knew I was crazy, and, evidently thinking it best to humor me, threw the throttle wide open, and away we went.

"I kissed my hand to the horse, grazing unconcernedly in the open field, and gave a smile to my crew. That was all I could give them, and hold myself and the eggs together. But the smile was enough. And they smiled through their smut at me, though one of them held fast to his shovel, while the other kept his hand upon a big ugly wrench. Neither of them spoke to me, but above the roar of the swaying engine I caught enough of their broken talk to understand that they were driving under a full head

of steam, with the intention of handing me over to the Boston police, as perhaps the safest way of disposing of me.

"I was only afraid that they would try it at the next station. But that station whizzed past without a bit of slack, and the next, and the next; when it came over me that this was the through freight, which should have passed in the night, and was making up lost time.

"Only the fear of the shovel and the wrench kept me from shaking hands with both men at this discovery. But I beamed at them; and they at me. I was enjoying it. The unwonted jar beneath my feet was wrinkling my diaphragm with spasms of delight. And the fireman beamed at the engineer, with a look that said, 'See the lunatic grin; he likes it!'

"He did like it. How the iron wheels sang to me as they took the rails! How the rushing wind in my ears sang to me! From my stand on the fireman's side of the cab I could catch a glimpse of the track just ahead of the engine, where the ties seemed to leap into the throat of the mile-devouring monster. The joy of it! of seeing space swallowed by the mile!

"I shifted the eggs from hand to hand and thought of my horse, of Agassiz, of the great book, of my great luck, — luck, — luck, — until the multitudinous tongues of the thundering train were all chiming 'luck! luck! luck!' They knew! they under-

stood! This beast of fire and tireless wheels was doing its best to get the eggs to Agassiz!

"We swung out past the Blue Hills, and yonder flashed the morning sun from the towering dome of the State House. I might have leaped from the cab and run the rest of the way on foot, had I not caught the eye of the engineer watching me narrowly. I was not in Boston yet, nor in Cambridge either. I was an escaped lunatic, who had held up a train, and forced it to carry me from Middleboro to Boston.

"Perhaps I had overdone the lunacy business. Suppose these two men should take it into their heads to turn me over to the police, whether I would or no? I could never explain the case in time to get the eggs to Agassiz. I looked at my watch. There were still a few minutes left in which I might explain to these men, who, all at once, had become my captors. But how explain? Nothing could avail against my actions, my appearance, and my little pail of sand.

"I had not thought of my appearance before. Here I was, face and clothes caked with yellow mud, my hair wild and matted, my hat gone, and in my full-grown hands a tiny tin pail of sand, as if I had been digging all night with a tiny tin shovel on the shore! And thus to appear in the decent streets of Boston of a Sunday morning!

"I began to *feel* like a lunatic. The situation

was serious, or might be, and rather desperately funny at its best. I must in some way have shown my new fears, for both men watched me more sharply.

"Suddenly, as we were nearing the outer freight-yard, the train slowed down and came to a stop. I was ready to jump, but still I had no chance. They had nothing to do, apparently, but to guard me. I looked at my watch again. What time we had made! It was only six o'clock, — a whole hour left in which to get to Cambridge!

"But I didn't like this delay. Five minutes — ten — went by.

"'Gentlemen,' I began, but was cut short by an express train coming past. We were moving again, on — into a siding — on to the main track — on with a bump and a crash and a succession of crashes, running the length of the train — on, on at a turtle's pace, but on, — when the fireman, quickly jumping for the bell-rope, left the way to the step free, and —

"I never touched the step, but landed in the soft sand at the side of the track, and made a line for the freight-yard fence.

"There was no hue or cry. I glanced over my shoulder to see if they were after me. Evidently their hands were full, or they didn't know I had gone.

"But I had gone; and was ready to drop over the high board-fence, when it occurred to me that I might drop into a policeman's arms. Hanging my

pail in a splint on top of a post, I peered cautiously over — a very wise thing to do before you jump a high board-fence. There, crossing the open square toward the station, was a big, burly fellow with a club — looking for me!

"I flattened for a moment, when some one in the freight-yard yelled at me. I preferred the policeman, and, grabbing my pail, I slid softly over to the street. The policeman moved on past the corner of the station out of sight. The square was free, and yonder stood a cab.

"Time was flying now. Here was the last lap. The cabman saw me coming, and squared away. I waved a dollar-bill at him, but he only stared the more. A dollar can cover a good deal, but I was too much for one dollar. I pulled out another, thrust them both at him, and dodged into the cab, calling, 'Cambridge!'

"He would have taken me straight to the police-station, had I not said, 'Harvard College. Professor Agassiz's house! I've got eggs for Agassiz,' pushing another dollar up at him through the hole.

"It was nearly half past six.

"'Let him go!' I ordered. 'Here's another dollar if you make Agassiz's house in twenty minutes. Let him out; never mind the police!'

"He evidently knew the police, or there were none around at that time on a Sunday morning. We went down the sleeping streets, as I had gone down the

wood-roads from the pond two hours before, but with the rattle and crash now of a fire brigade. Whirling a corner into Cambridge Street, we took the bridge at a gallop, the driver shouting out something in Hibernian to a pair of waving arms and a belt and brass buttons.

"Across the bridge with a rattle and jolt that put the eggs in jeopardy, and on over the cobble-stones, we went. Half standing, to lessen the jar, I held the pail in one hand and held myself in the other, not daring to let go even to look at my watch.

"But I was afraid to look at the watch. I was afraid to see how near to seven o'clock it might be. The sweat was dropping down my nose, so close was I running to the limit of my time.

"Suddenly there was a lurch, and I dived forward, ramming my head into the front of the cab, coming up with a rebound that landed me across the small of my back on the seat, and sent half of my pail of eggs helter-skelter over the floor.

"We had stopped. Here was Agassiz's house; and without taking time to pick up the eggs that were scattered, I jumped out with my pail and pounded at the door.

"No one was astir in the house. But I would stir some one. And I did. Right in the midst of the racket the door opened. It was the maid.

"'Agassiz,' I gasped, 'I want Professor Agassiz, quick!' And I pushed by her into the hall.

"'Go 'way, sir. I'll call the police. Professor Agassiz is in bed. Go 'way, sir!'

"'Call him — Agassiz — instantly, or I'll call him myself.'

"But I did n't; for just then a door overhead was flung open, a great white-robed figure appeared on the dim landing above, and a quick loud voice called excitedly, —

"'Let him in! Let him in. I know him. He has my turtle eggs!'

"And the apparition, slipperless, and clad in anything but an academic gown, came sailing down the stairs.

"The maid fled. The great man, his arms extended, laid hold of me with both hands, and dragging me and my precious pail into his study, with a swift, clean stroke laid open one of the eggs, as the watch in my trembling hands ticked its way to seven — as if nothing unusual were happening to the history of the world."

CHAPTER XII

AN ACCOUNT WITH NATURE

THERE were chipmunks everywhere. The stone walls squeaked with them. At every turn, from early spring to early autumn, a chipmunk was scurrying away from me. Chipmunks were common. They did no particular harm, no particular good; they did nothing in particular, being only chipmunks and common, or so I thought, until one morning (it was June-bug time) when I stopped and watched a chipmunk that sat atop the stone wall down in the orchard. He was eating, and the shells of his meal lay in a little pile upon the big flat stone which served as his table.

They were acorn-shells, I thought; yet June seemed rather late in the season for acorns, and, looking closer, I discovered that the pile was entirely composed of June-bug shells — wings and hollow bodies of the pestiferous beetles!

Well, well! I had never seen this before, never even heard of it. Chipmunk, a *useful* member of society! actually eating bugs in this bug-ridden world of mine! This was interesting and important. Why, I had really never known Chipmunk, after all!

So I had n't. He had always been too common.

Flying squirrels were more worth while, because there were none on the farm. Now, however, I determined to cultivate the acquaintance of Chipmunk, for there might be other discoveries awaiting me. And there were.

A narrow strip of grass separated the orchard and my garden-patch. It was on my way to the garden that I most often stopped to watch this chipmunk, or rather the pair of them, in the orchard wall. June advanced, the beetles disappeared, and the two chipmunks in the wall were now seven, the young ones almost as large as their parents, and both young and old on the best of terms with me.

For the first time in four years there were prospects of good strawberries. Most of my small patch was given over to a new variety, one that I had originated; and I was waiting with an eagerness which was almost anxiety for the earliest berries.

I had put a little stick beside each of the three big berries that were reddening first (though I could have walked from the house blindfolded and picked them). I might have had the biggest of the three on June 7th, but for the sake of the flavor I thought it best to wait another day. On the 8th I went down to get it. The big berry was gone, and so was one of the others, while only half of the third was left on the vine!

Gardening has its disappointments, its seasons of despair — and wrath, too. Had a toad showed him-

CHIPMUNK EATING JUNE-BUGS

self at that moment, he might have fared badly, for more than likely, I thought, it was he who had stolen my berries. On the garden wall sat a friendly chipmunk eying me sympathetically.

A few days later several fine berries were ripe, and I was again on my way to the garden when I passed the chipmunks in the orchard. A shining red spot among the vine-covered stones of their wall brought me to a stop. For an instant I thought that it was my rose-breasted grosbeak, and that I was about to get a clew to its nest. Then up to the slab where he ate the June-bugs scrambled the chipmunk, and the rose-red spot on the breast of the supposed grosbeak dissolved into a big scarlet-red strawberry. And by its long wedge shape I knew it was one of my new variety.

I hurried across to the patch and found every berry gone, while a line of bloody fragments led me back to the orchard wall, where a half-dozen fresh calyx crowns completed my second discovery.

No, it did not complete it. It took a little watching to find out that the whole family — all seven! — were after those berries. They were picking them half ripe, even, and actually storing them away, canning them, down in the cavernous depths of the stone-pile!

Alarmed? Yes, and I was wrathful, too. The taste for strawberries is innate, original; you can't be human without it. But joy in chipmunks is a cultivated liking. What chance in such a circumstance

has the nature-lover with the human man? What shadow of doubt as to his choice between the chipmunks and the strawberries?

I had no gun and no time to go over to my neighbor's to borrow his. So I stationed myself near by with a fistful of stones, and waited for the thieves to show themselves. I came so near to hitting one of them with a stone that the sweat started all over me. After that there was no danger. I had lost my nerve. The little scamps knew that war had been declared, and they hid and dodged and sighted me so far off that even with a gun I should have been all summer killing the seven of them.

Meantime, a good rain and the warm June days were turning the berries red by the quart. They had more than caught up to the chipmunks. I dropped my stones and picked. The chipmunks picked, too; so did the toads and the robins. Everybody picked. It was free for all. We picked them and ate them, jammed them, and canned them. I almost carried some over to my neighbor, but took peas instead.

The strawberry season closed on the Fourth of July; and our taste was not dimmed, nor our natural love for strawberries abated; but all four of the small boys had hives from over-indulgence, so bountifully did Nature provide, so many did the seven chipmunks leave us!

Peace between me and the chipmunks had been signed before the strawberry season closed, and the

pact still holds. Other things have occurred since to threaten it, however. Among them, an article in a recent number of an out-of-door magazine, of wide circulation. Herein the chipmunk family was most roundly rated, in fact condemned to annihilation because of its wicked taste for birds' eggs and for the young birds. Numerous photographs accompanied the article, showing the red squirrel with eggs in his mouth, but no such proof (even the red squirrel photographs, I strongly believe, were done from a *stuffed* squirrel) of Chipmunk's guilt, though he was counted equally bad and, doubtless, will suffer with Chickaree at the hands of those who have taken the article seriously.

I believe that would be a great mistake. Indeed, I believe the article a deliberate falsehood, concocted in order to sell the made-up photographs. Chipmunk is not an egg-sucker, else I should have found it out. But of course that does not mean that no one else has found it out. It does mean, however, that if Chipmunk robs at all he does it so seldom as to call for no alarm or retribution.

There is scarcely a day in the nesting-season when I fail to see half a dozen chipmunks about the walls, yet I have never noticed one even suspiciously near a bird's nest. In an apple tree, scarcely six jumps from the home of the family in the orchard wall, a brood of tree swallows came to wing this spring; while robins, chippies, and red-eyed vireos — not to

mention a cowbird, which I wish they had devoured — have also hatched and flown away from nests that these squirrels might easily have rifled.

It is not often that one comes upon even the red squirrel in the very act of robbing a nest. But the black snake, the glittering fiend! and the dear house cats! If I run across a dozen black snakes in the early summer, it is safe to say that six of them are discovered to me by the cries of the birds that they are robbing. So is it with the cats. No creature larger than a June-bug, however, is often distressed by a chipmunk. In a recent letter to me Mr. Burroughs says: —

"No, I never knew the chipmunk to suck or destroy eggs of any kind, and I have never heard of any well-authenticated instance of his doing so. The red squirrel is the sinner in this respect, and probably the gray squirrel also."

It will be difficult to find a true bill against him. Were the evidence all in, I believe that instead of a culprit we should find Chipmunk a useful citizen. Does not that pile of June-bug bodies on the flat stone leave me still in debt to him? He may err occasionally, and may, on occasion, make a nuisance of himself — but so do my four small boys, bless them! And, well, — who does n't? When a family of chipmunks, which you have fed all summer on the veranda, take up their winter quarters inside the closed cabin, and chew up your quilts, hammocks,

table-cloths, and whatever else there is of chewable properties, then they are anathema.

The havoc certain chipmunks in the mountains once made among our possessions was dreadful. But instead of exterminating them root and branch, a big box was prepared the next summer and lined with tin, in which the linen was successfully wintered.

But how real was the loss, after all? Here was a rough log cabin on the side of Thorn Mountain. What sort of table-cloth ought to be found in such a cabin, if not one that has been artistically chewed by chipmunks? Is it for fine linen that we take to the woods in summer? The chipmunks are well worth a table-cloth now and then — well worth, besides these, all the strawberries and all the oats they can steal from my small patch.

Only it is n't stealing. Since I ceased throwing stones and began to watch the chipmunks carefully, I do not find that their manner is in the least the manner of thieves. They do not act as if they were taking what they have no right to. For who has told Chipmunk to earn his oats in the sweat of his brow? No one. Instead, he seems to understand that he is one of the innumerable factors ordained to make me sweat — a good and wholesome experience for me so long as I get the necessary oats.

And I get them, in spite of the chipmunks, though I don't like to guess at the quantity of oats they have carried off — anywhere, I should say, from a peck to a

bushel, which they have stored as they tried to store the berries, somewhere in the big recesses of the stone wall.

All this, however, is beside the point. It is n't a case of oats and berries against June-bugs. You don't haggle with Nature after that fashion. The farm is not a market-place where you get exactly what you pay for. You must spend on the farm all you have of time and strength and brains; but you must not expect in return merely your money's worth. Infinitely more than that, and oftentimes less. Farming is like virtue, — its own reward. It pays the man who loves it, no matter how short the crop of oats and corn.

So it is with Chipmunk. Perhaps his books don't balance — a few June-bugs short on the credit side. What then? It is n't mere bugs and berries, as I have just suggested, but stone-piles. What is the difference in value to me between a stone-pile with a chipmunk in it and one without. Just the difference, relatively speaking, between the house with my four boys in it, and the house without.

Chipmunk, with his sleek, round form, his rich color and his stripes, is the daintiest, most beautiful of all our squirrels. He is one of the friendliest of my tenants, too, friendlier even than the friendliest of my birds — Chickadee. The two are very much alike in spirit; but however tame and confiding Chickadee may become, he is still a bird and belongs to a different

and, despite his wings, lower order of beings. Chickadee is often curious about me; he can be coaxed to eat from my hand. Chipmunk is more than curious; he is interested; and it is not crumbs that he wants, but friendship. He can be coaxed to eat from my lips, sleep in my pocket, and even come to be stroked.

I have sometimes seen Chickadee in winter when he seemed to come to me out of very need for living companionship. But in the flood-tide of summer life Chipmunk will watch me from his stone-pile and tag me along with every show of friendship.

The family in the orchard wall have grown very familiar. They flatter me. One or another of them, sitting upon the high flat slab, sees me coming. He sits on the very edge of the crack, to be truthful; and if I take a single step aside toward him, he flips, and all there is left of him is a little angry squeak from the depths of the stones. If, however, I pass properly along, do not stop or make any sudden motion, he sees me past, then usually follows me, especially if I get well off and pause.

During a shower one day I halted under a large hickory just beyond his den. He came running after me, so interested that he forgot to look to his footing, and just opposite me slipped and bumped his nose hard against a stone — so hard that he sat up immediately and vigorously rubbed it. Another time he followed me across to the garden and on until he came to the barbed-wire fence along the meadow.

Here he climbed a post and continued after me by way of the middle strand of the wire, wriggling, twisting, even grabbing the barbs, in his efforts to maintain his balance. He got midway between the posts, when the sagging strand tripped him and he fell with a splash into a shallow pool below. No, he did not drown, but his curiosity did get a ducking.

Did the family in the orchard wall stay together as a family for the first summer? I should like to know. As late as August they all seemed to be in the wall; for in August I cut my oats, and during this harvest we all worked together.

I mowed the oats as soon as they began to yellow, cocking them to cure for hay. It was necessary to let them "make" for six or seven days, and all this time the chipmunks raced back and forth between the cocks and the stone wall. They might have hidden their gleanings in a dozen crannies nearer at hand; but evidently they had a particular storehouse, near the home nest, where the family could get at their provisions in bad weather without coming forth.

Had I removed the stones and dug out the nest, I should have found a tunnel leading into the ground for a few feet and opening into a chamber filled with a bulky grass nest — a bed capable of holding half a dozen chipmunks — and, adjoining this, by a short passageway, the storehouse of the oats.

How many trips they made between this crib and

the oat-patch, how many kernels they carried in their pouches at a trip, and how big a pile they had when all the grains were in, — these are more of the things I should like to know.

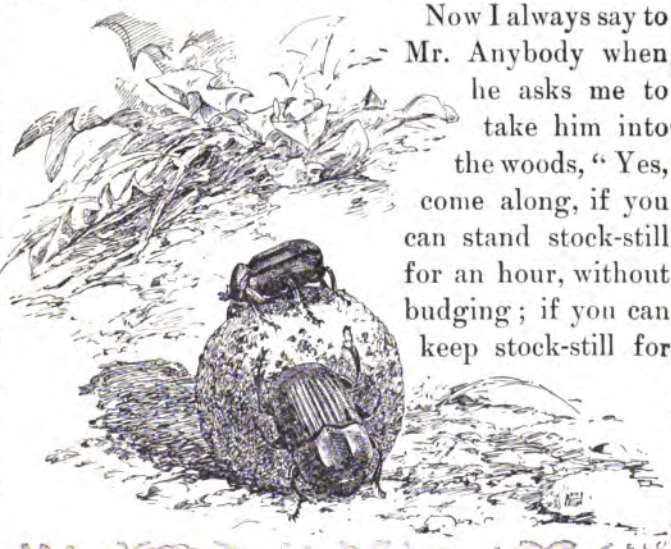
When the first frosts come, the family — if they are still a family — seek the nest in the ground beneath the stone wall. But they do not go to sleep immediately. Their outer entrances have not yet been closed. There is still plenty of fresh air and, of course, plenty of food — acorns, chestnuts, hickory-nuts, and oats. They doze quietly for a time and then they eat, pushing the empty shells and hulls into some side passage prepared beforehand to receive the débris.

But soon the frost is creeping down through the stones and earth overhead, the rains are filling the outer doorways and shutting off the supply of fresh air; and one day, though not sound sleepers, the family cuddle down and forget to wake entirely until the frost has begun to creep back toward the surface, and in through the softened soil is felt the thrill of the waking spring.

CHAPTER XIII

WOODS MEDICINE

THE real watcher in the woods usually goes off by himself. He hates to have anybody along; for Anybody wants to be moving all the time, and Anybody wants to be talking all the time, and Anybody wants to be finding a circus, or a zoo, or a natural history museum in the middle of the woods, else Anybody wishes he had stayed at home or gone to the ball-game.



Now I always say to Mr. Anybody when he asks me to take him into the woods, "Yes, come along, if you can stand stock-still for an hour, without budging; if you can keep stock-still for

an hour, without talking; if you can get as excited watching two tumble-bugs trying to roll their ball up hill, as you do watching nine baseball men trying to bat their ball about a field."

The doctor pulled a small blank book out of his vest pocket, scribbled something in Latin and Chinese (at least it looked like Chinese), and then at the bottom wrote in English, "Take one teaspoonful every hour"; and, tearing off the leaf, handed it to the patient. It was a prescription for some sort of medicine.

Now I am going to give you a prescription, — for some woods medicine, — a magic dose that will cure you of blindness and deafness and clumsy-footedness, that will cause you to see things and hear things and think things in the woods that you have never thought or heard or seen in the woods before. Here is the prescription: —

WOOD CHUCK, M. D.,
MULLEIN HILL.

Office Hours:
5.30 A.M. until Breakfast.

℞

No moving for one hour . . .
No talking for one hour . . .
No dreaming or thumb-twiddling the while .

Sig: **The dose to be taken from the top of a stump with a bit of sassafras bark or a nip of Indian turnip every time you go into the woods.**

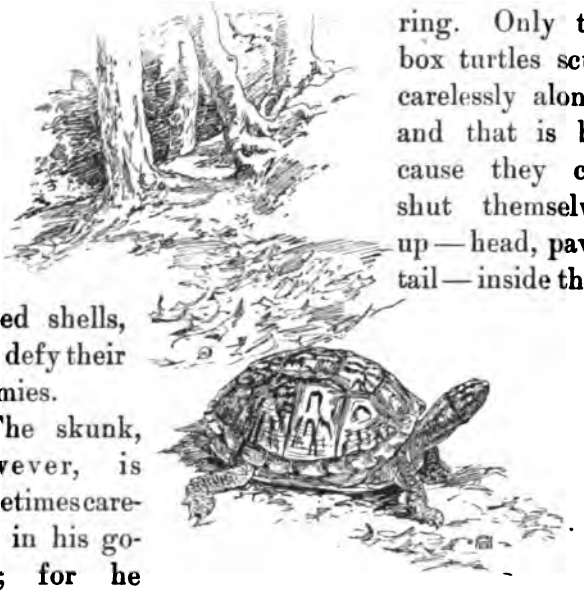
WOOD CHUCK.

I know that this compound will cure if you begin taking it early enough — along, I should say, from the Fifth to the Eighth Grades. It is a very difficult dose to take at any age, but it is almost impossible for grown-ups to swallow it; for they have so many things to do, or think they have, that they can't sit still a whole hour anywhere — a terrible waste of time! And then they have been talking for so many years that to stop for a whole hour might — kill them, who knows! And they have been working nervously with their hands so long that their thumbs will twiddle, and to sleep they will go the minute they sit down, in spite of themselves. It is no use to give this medicine to grown-ups. They are what Dr. Wood Chuck calls "chronics" — hopeless hurriers who will never sit down upon a stump, who, when the Golden Chariot comes for them, will stand up and drive all the way to heaven.

However, I am not giving this medicine to grown-ups, but to you. Of course you will make a bad face over it, too; for, young or old, it is hard to sit still and even harder to keep still — I mean not to talk. I have closely watched four small boys these several years now, and I never knew one of them to sit still for a whole hour *at home* — not once in his whole life! And as for his tongue! he might tuck that into his cheek, hold it down between his teeth, crowd it back behind his fist — no matter. The tongue is an unruly member. But let these four

boys get into the woods, and every small pale-face of them turns Indian instinctively, tip-toeing up and down the ridges with lips as close-sealed as if some finger of the forest were laid upon them. So it must be with you when you enter the fields and woods.

The wood-born people are all light-footed and cautious in their stirring. Only the box turtles scuff carelessly along; and that is because they can shut themselves up — head, paws, tail — inside their lidded shells, and defy their enemies.



The skunk, however, is sometimes careless in his going; for he knows that he will neither be crowded nor jostled along the street, so he naturally behaves as if all the woods were his. Yet, how often do you come upon a skunk? Seldom — because, he is quite as unwilling to meet you as you are to meet him; but as one of your little feet makes as much noise in

the leaves as all four of his, he hears you coming and turns quietly down some alley or in at some burrow and allows you to pass on.

Louder than your step in the woods is the sound of your voice. Perhaps there is no other noise so far-reaching, so alarming, so silencing in the woods as the human voice. When your tongue begins, all the other tongues cease. Songs stop as by the snap of a violin string; chatterings cease; whisperings end — mute are the woods and empty as a tomb, except the wind be moving aloft in the trees.

Three things all the animals can do supremely well: they can hear well; they can see motion well; they can wait well.

If you would know how well an animal can wait, scare Dr. Wood Chuck into his office, then sit down outside and wait for him to come out. It would be a rare and interesting thing for you to do. No one has ever done it yet, I believe! Establish a world's record for keeping still! But you should scare him in at the beginning of your summer vacation so as to be sure you have all the waiting-time the state allows: for you may have to leave the hole in September and go back to school.

When the doctor wrote the prescription for this medicine, "No moving for an hour," he was giving you a very small, a homeopathic dose of patience, as you can see; for *an hour* at a time, every wood-watcher knows, will often be only a waste of time,

unless followed immediately by another hour of the same.

On the road to the village one day, I passed a fox-hunter sitting atop an old stump. It was about seven o'clock in the morning.

"Hello, Will!" I called, "been out all night?"

"No, got here 'bout an hour ago," he replied.

I drove on and, returning near noon, found Will still atop the stump.

"Had a shot yet?" I called.

"No, the dogs brought him down 'tother side the brook, and carried him over to the Shanty field."

About four o'clock that afternoon I was hurrying down to the station, and there was Will atop that same stump.

"Got him yet?" I called.

"No, dogs are fetching him over the Quarries now" —and I was out of hearing.

It was growing dark when I returned; but there was Will Hall atop the stump. I drew up in the road.

"Grown fast to that stump, Will?" I called. "Want me to try to pull you off?"

"No, not yet," he replied, jacking himself painfully to his feet. "Chillin' up some, ain't it?" he added shaking himself. "Might 's well go home, I guess"—when from the direction of Young's Meadows came the eager voice of his dogs; and, waving me on, he got quickly back atop the stump, his gun ready across his knees.

I was nearly home when, through the muffle of the darkening woods, I heard the quick *bang! bang!* of Will's gun.

Yes, he got him, a fine red fox. And speaking to me about it one day, he said, —

"There 's a lot more to sittin' still than most folks thinks. The trouble is, most folks in the woods can't stand the monopoly of it."

Will's English needs touching up in spots; but he can show the professors a great many things about the ways of the woods.

And now what does the doctor mean by "No dreaming or thumb-twiddling" in the woods? Just this: that not only must you be silent and motionless for hours at a time, but you must also be alert — watchful, keen, ready to take a hint, to question, guess, and interpret. The fields and woods are not full of life, but full only of the sounds, shadows, and signs of life.

You are atop of your stump, when over the ridge you hear a slow, quiet rustle in the dead leaves — a skunk; then a slow, *loud* rustle — a turtle; then a *quick*, loud — *one-two-three* — rustle — a chewink; then a tiny, rapid rustle — a mouse; then a long, rasping rustle — a snake; then a measured, galloping rustle — a squirrel; then a light-heavy, hop-thump rustle — a rabbit; then — and not once have you seen the rustlers in the leaves beyond the ridge; and not once have you stirred from your stump.

Perhaps this understanding of the leaf-sounds might be called "interpretation"; but before you can interpret them, you must hear them; and no dozing, dreaming, fuddling sitter upon a stump has ears to hear.

As you sit there, you notice a blue jay perched silent and unafraid directly over you — not an ordinary, common way for a blue jay to act. "Why?" you ask. Why, a nest, of course, somewhere near! Or, suddenly round and round the trunk of a large oak tree whirls a hummingbird. "Queer," you say. Then up she goes — and throwing your eye ahead of her through the tree-tops you chance to intercept her bee-line flight — a hint! She is probably gathering lichens for a nest which she is building somewhere near, in the direction of her flight. A whirl! a flash! — as quick as light! You have a wonderful story!

Now do not get the impression that all one needs to do in order to become acquainted with the life of the woods is to sit on a stump a long time, say nothing, and listen hard. All that is necessary — rather, the ability to do it is necessary; but in the woods or out it is also necessary to exercise common sense. Guess, for instance, when guessing is all that you can do. You will learn more, however, and learn it faster, generally, by following it up, than by sitting on a stump and guessing about it.

At twilight, in the late spring and early summer,

we frequently hear a gentle, tremulous call from the woods or from below in the orchard. "What is it?" I had been asked a hundred times, and as many times had guessed that it might be the hen partridge clucking to her brood; or else I had replied that it made me think of the mate-call of a coon, or that I half inclined to believe it the cry of the woodchucks, or that possibly it might be made by the owls. In fact, I did n't know the peculiar call, and year after year I kept guessing at it.

We were seated one evening on the porch listening to the whip-poor-wills, when some one said, "There 's your woodchuck singing again." Sure enough, there sounded the tremulous woodchuck-partridge-owl-coon-cry. I slipped down through the birches determined at last to know that cry and stop guessing about it, if I had to follow it all night.

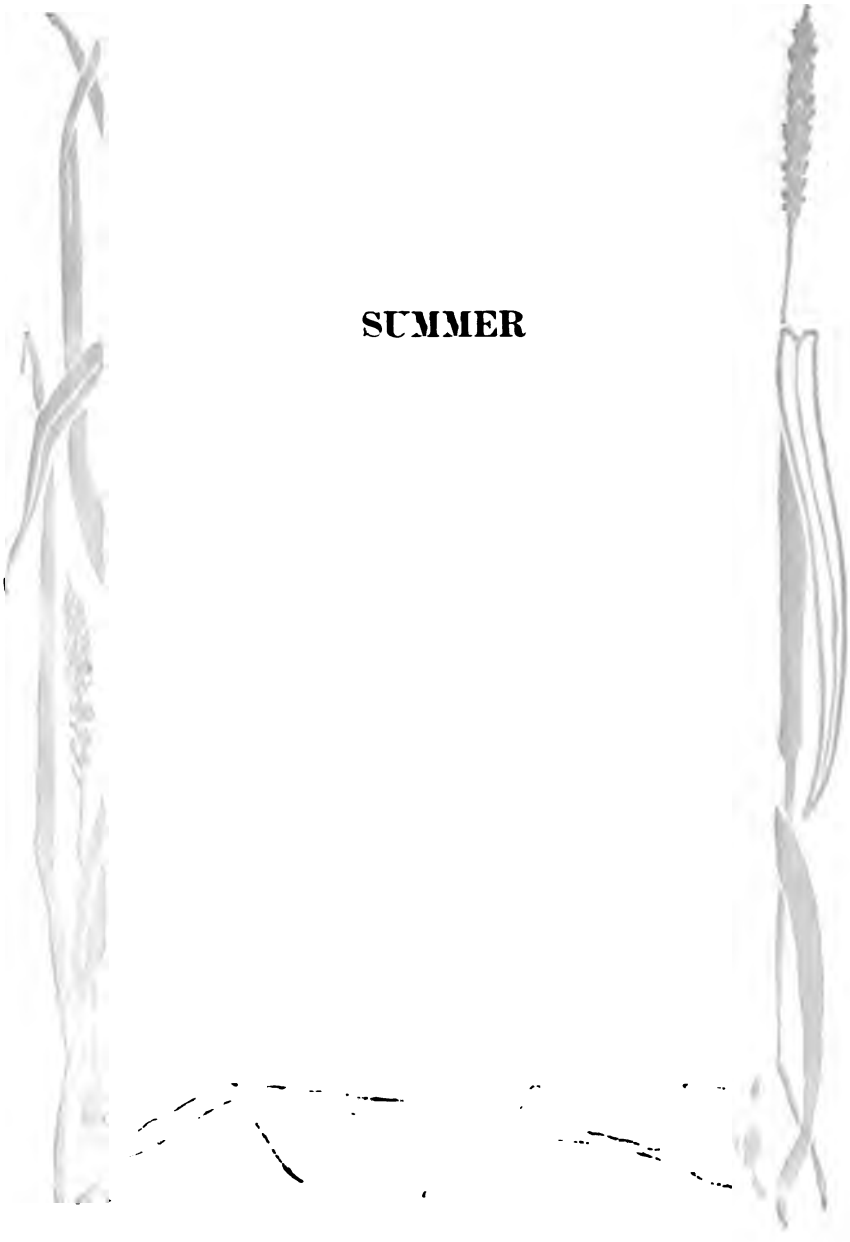
The moon was high and full, the footing almost noiseless, and everything so quiet that I quickly located the clucking sounds as coming from the orchard. I came out of the birches into the wood-road, and was crossing the open field to the orchard, when something dropped with a swish and a vicious clacking close upon my head. I jumped from under my hat, almost, — and saw the screech owl swoop softly up into the nearest apple tree. Instantly she turned toward me and uttered the gentle purring cluck that I had been guessing at so hard for at least three years. And even while I looked at her, I saw

in the tree beyond, silhouetted against the moonlit sky, two round bunches, — young owls evidently, — which were the explanation of the calls. These two, and another young one, were found in the orchard the following day.

I rejoined the guessers on the porch and gave them the satisfying fact, but only after two or three years of guessing about it. I had laughed once at some of my friends over on the other road who had bolted their front door and had gone out of the door at the side of the house for precisely twenty-one years because the key in the front-door lock would n't work. They were intending to have it fixed, but the children being little kept them busy; then the children grew up, and of course kept them busier; got married at last and left home — all but one daughter. Still the locksmith was not called to fix that front door. One day this unmarried daughter, in a fit of impatience, got at that door herself, and found that the key had been inserted just twenty-one years before — *upside down!*

There I had sat on the porch — on a stump, let us say, and guessed about it. Truly, my key to this mystery had been left long in the lock, upside down, while I had been going in and out by the side door.

No, you must *go* into the fields and woods, go deep and far and frequently, with eyes and ears and all your souls alert!



SUMMER

A SUMMER EVENING — NIGHT HERONS (page 54)

SUMMER

CHAPTER I

THE SUMMER AFIELD

THE word summer, being interpreted, means vacation; and vacation, being interpreted, means — so many things that I have not space in this book to name them. Yet how can there be a vacation without mountains, or seashore, or the fields, or the forests — days out of doors? My ideal vacation would have to be spent in the open; and this book, the larger part of it, is the record of one of my summer vacations — the vacation of the summer of 1912. That was an ideal vacation, and along with my account of it I wish to give you some hints on how to make the most of your summer chance to tramp the fields and woods.

For the real lover of nature is a tramp; not the kind of tramp that walks the railroad-ties and carries his possessions in a tomato-can, but one who follows the cow-paths to the fields, who treads the rabbit-roads in the woods, watching the ways of the wild things that dwell in the tree-tops, and in the deepest burrows under ground.

Do not tell anybody, least of all yourself, that you love the out-of-doors, unless you have your own path to the woods, your own cross-cut to the pond, your own particular huckleberry-patch and fishing-holes and friendships in the fields. The winds, the rain, the stars, the green grass, even the birds and a multitude of other wild folk try to meet you more than half-way, try to seek you out even in the heart of the great city; but the great out-of-doors you must seek, for it is not in books, nor in houses, nor in cities. It is out at the end of the car-line or just beyond the back-yard fence, maybe — far enough away, anyhow, to make it necessary for you to put on your tramping shoes and with your good stout stick go forth.

You must learn to be a good tramper. You thought you learned how to walk soon after you got out of the cradle, and perhaps you did, but most persons only know how to hobble when they get into the unpaved paths of the woods.

With stout, well-fitting shoes, broad in the toe and heel; light, stout clothes that will not catch the briers, good bird-glasses, and a bite of lunch against the noon, swing out on your *legs;* breathe to the bottom of your lungs; balance your body on your hips, not on your collar-bones, and, going leisurely, but not slowly (for crawling is deadly dull), do ten miles up a mountain-side or through the brush; and if at the end you feel like *eating up* ten miles more,

then you may know that you can walk, can *tramp*, and are in good shape for the summer.

In your tramping-kit you need: a pocket-knife; some string; a pair of field-glasses; a botany-can or fish-basket on your back; and perhaps a notebook. This is all and more than you need for every tramp. To these things might be added a light camera. It depends upon what you go for. I have been afield all my life and have never owned or used a camera. But there are a good many things that I have never done. A camera may add a world of interest to your summer, so if you find use for a camera, don't fail to make one a part of your tramping outfit.

After all, what you carry on your back or on your feet or in your hands does not matter half so much as what you carry in your head and heart — your eye, and spirit, and purpose. For instance, when you go into the fields have some purpose in your going besides the indefinite desire to get out of doors.

If you long for the wide sky and the wide winds and the wide slopes of green, then that is a real and a definite desire. You want to get out, OUT, OUT, because you have been shut *in*. Very good; for you will get what you wish, what you go out to get. The point is this: always go out for something. Never yawn and slouch out to the woods as you might to the corner grocery store, because you don't know how else to kill time.

Go with some purpose; because you wish to visit some particular spot, see some bird, find some flower, catch some — fish! Anything that takes you into the open is good — ploughing, hoeing, chopping, fishing, berrying, botanizing, tramping. The aimless person anywhere is a failure, and he is sure to get lost in the woods!

It is a good plan to go frequently over the same fields, taking the beaten path, watching for the familiar things, until you come to know your haunt as thoroughly as the fox or the rabbit knows his. Don't be afraid of using up a particular spot. The more often you visit a place the richer you will find it to be in interest for you.

Now, do not limit your interest and curiosity to any one kind of life or to any set of things out of doors. Do not let your likes or your prejudices interfere with your seeing the whole out-of-doors with all its manifold life, for it is all interrelated, all related to you, all of interest and meaning. The clover blossom

and the bumblebee that carries the fertilizing pollen are related; the bumblebee and the mouse that eats up its grubs are related; and every one knows that mice and cats are related; thus the clover, the bumblebee, the mouse, the cat, and, finally, the farmer, are all so interrelated that if the farmer keeps a cat, the cat will catch the mice, the mice cannot eat the young bumblebees, the bumblebees can fertilize the clover, and the clover can make seed. So if the farmer wants clover seed to sow down a new field with, he must keep a cat.

I think it is well for you to have some one thing in which you are particularly interested. It may be flowers or birds or shells or minerals. But as the whole is greater than any of its parts, so a love and knowledge of nature, of the earth and the sky over your head and under your feet, with all that lives with you there, is more than a knowledge of its birds or trees or reptiles.

But be on your guard against the purpose to spread yourselves over too much. Don't be thin and superficial. Don't be satisfied with learning the long Latin names of things while never watching the ways of the things that have the names. As they sat on the porch, so the story goes, the school trustee called attention to a familiar little orange-colored bug, with black spots on his back, that was crawling on the floor.

"I s'pose you know what that is?" he said.

"Yes," replied the applicant, with conviction; "that is a *Coccinella septempunctata.*"

"Young man," was the rejoinder, "a feller as don't know a ladybug when he sees it can't get my vote for teacher in this deestrict."

The "trustee" was right; for what is the use of knowing that the little ladybug is *Coc-ci-nel'-la sep-tem-punc-ta'-ta* when you do not know that she is a ladybug, and that you ought to say to her:—

> "Ladybug, ladybug, fly away home;
> Your house is on fire, your children alone"?

Let us say, now, that you are spending your vacation in the edge of the country within twenty miles of a great city such as Boston. That might bring you out at Hingham, where I am spending mine. In such an ordinary place (if any place *is* ordinary,) what might you expect to see and watch during the summer?

Sixty species of birds, to begin with! They will keep you busy all summer. The wild animals, beasts, that you will find depend so very much upon your locality — woods, waters, rocks, etc. — that it is hard to say how many they will be. Here in my woods you might come upon three or four species of mice, three species of squirrels, the mink, the muskrat, the weasel, the mole, the shrew, the fox, the skunk, the rabbit, and even a wild deer. Of reptiles and amphibians you would see several more species than of fur-bearing animals, — six snakes, four common turtles, two sala-

manders, frogs, toads, newts, — a wonderfully interesting group, with a real live rattler among them if you should go over to the Blue Hills, fifteen miles away.

RED SALAMANDERS, OLD AND YOUNG

You will go many times into the fields before you can make of the reptiles your friends and neighbors. But by and by you will watch them and note their ways with as much interest as you watch the other wild folk about you. It is a pretty shallow lover of nature who jumps upon a little snake with both feet, or who shivers when a little salamander drops out of the leaf-mould at his feet.

NEWTS

And what shall I say of the fishes? There are a dozen of them in the stream and ponds within the compass of my haunt. They are a fascinating family, and one very little watched by the ordinary tramper. But *you* are not ordinary. Quiet and patience and much putting together of scraps of observations will be necessary if you are to get at the whole story of any fish's life. The story will be worth it, however.

No, I shall not even try to *number* the insects—the butterflies, beetles, moths, wasps, bees, bugs, ticks, mites, and such small "deer" as you will find in the round of your summer's tramp. Nor shall I try to name the flowers and trees, the ferns and mosses. It is with the common things that you ought now to become familiar, and one summer is all too short for the things you ought to see and hear and do in your vacation out of doors.

CHAPTER II

THE WILD ANIMALS AT PLAY

THE watcher of wild animals never gets used to the sight of their mirthless sport. In all other respects animal play is entirely human.

A great deal of human play is serious — desperately serious on the football-field, and at the card-table, as when a lonely player is trying to kill time with solitaire.

I have watched a great ungainly hippopotamus for hours trying to do the same solemn thing by cuffing a croquet-ball back and forth from one end of

his cage to the other. His keepers told me that without the plaything the poor caged giant would fret and worry himself to death. It was his game of solitaire.

In all their games of rivalry the animals are serious as humans, and, forgetting the fun, often fall to fighting — a sad case, indeed. But brutes are brutes. We cannot expect anything better of the animals. Only this morning the whole flock of chickens in the hen-yard started suddenly on the wild flap to see which would beat to the back fence and wound up on the "line" in a free fight, two of the cockerels tearing the feathers from each other in a desperate set-to.

You have seen puppies fall out in the same human fashion, and kittens also, and older folk as well. I have seen a game of wood-tag among friendly gray squirrels come to a finish in a fight. As the crows pass over during the winter afternoon, you will notice their play — racing each other through the air, diving, swooping, cawing in their fun, when suddenly some one's temper snaps, and there is a mix-up in the air.

They can get angry, but they cannot laugh. I once saw what I thought was a twinkle of merriment, however, in an elephant's eye. It was at the circus several years ago. The keeper had just set down for one of the elephants a bucket of water which a perspiring youth had brought in. The big beast sucked it quietly up, — the whole of it, — swung gently around as if to thank the perspiring boy, then soused him, the whole bucketful! Everybody roared, and one of the other elephants joined in with trumpetings, so huge and jolly was the joke.

The elephant who played the trick looked solemn

enough, except for a twitch at the lips and a glint in the eye. There is something of a smile about every elephant's lips, to be sure, and fun is so contagious that one should hesitate to say that he saw an elephant laugh. But if that elephant did n't laugh, it was not his fault.

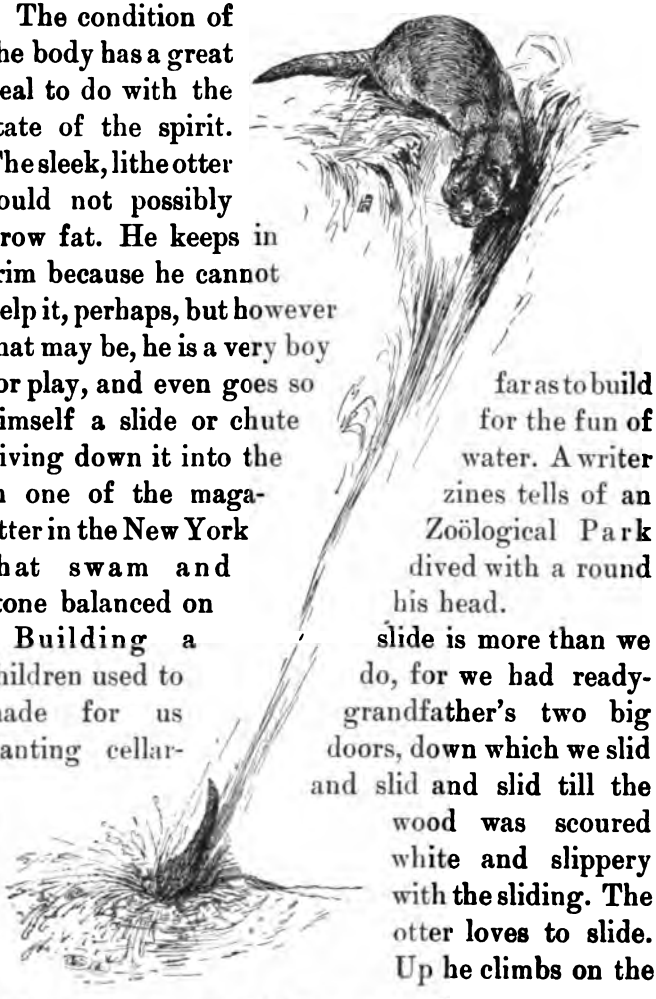
From the elephant to the infusorian, the microscopic animal of a single cell known as the paramœcium, is a far cry — to the extreme opposite end of the animal kingdom, worlds apart. Yet I have seen *Paramœcium caudatum* at play in a drop of water under a compound microscope, as I have seen elephants at play in their big bath-tub at the zoölogical gardens.

Place a drop of stagnant water under your microscope and watch these atoms of life for yourself. Invisible to the naked eye, they are easily followed on the slide as they skate and whirl and chase one another to the boundaries of their playground and back again, first one of them "it," then another. They stop to eat, they slow up to divide their single-celled bodies into two cells, the two cells now two living creatures where a moment before they were but one, both of them swimming off immediately to feed and multiply and play.

Play seems to be as natural and as necessary to the wild animals as it is to human beings. Like us the animals play hardest while young, but as some human children never outgrow their youth and love

of play, so there are old animals that never grow too fat nor too stiff nor too stupid to play.

The condition of the body has a great deal to do with the state of the spirit. The sleek, lithe otter could not possibly grow fat. He keeps in trim because he cannot help it, perhaps, but however that may be, he is a very boy for play, and even goes so far as to build himself a slide or chute for the fun of diving down it into the water. A writer in one of the magazines tells of an otter in the New York Zoölogical Park that swam and dived with a round stone balanced on his head.



Building a slide is more than children used to do, for we had ready-made for us grandfather's two big slanting cellar-doors, down which we slid and slid and slid till the wood was scoured white and slippery with the sliding. The otter loves to slide. Up he climbs on the

bank, then down he goes — splash — into the stream. Up he climbs and down he goes — time after time, day after day. There is nothing like a slide, unless it is a cellar-door.

How much of a necessity to the otter is his play, one would like to know — what he would give up for it, and how he would do deprived of it. In the case of Pups, my neighbor's beautiful young collie, play seems more needful than food. There are no children, no one, to play with him there, so that the sight of my small boys sets him almost frantic.

His efforts to induce a hen or a rooster to play with him are pathetic. The hen cannot understand. She has n't a particle of play in her anyhow, but Pups cannot get that through his head. He runs rapidly around her, drops on all fours flat, swings his tail, cocks his ears, looks appealingly and barks a few little cackle-barks, as nearly hen-like as he can bark them, then dashes off and whirls back — while the hen picks up another bug. She never sees Pups. The old white coon cat is better; but she is usually up the miff-tree. Pups steps on her, knocks her over, or otherwise offends, especially when he tags her out into the fields and spoils her hunting. The Society for the Prevention of Cruelty to Animals ought to send some child or puppy out to play with Pups of a Saturday.

I doubt if among the lower forms of animals play

holds any such prominent place as with the dog and the keen-witted, intelligent otter. To catch these lower animals at play is a rare experience. One of our naturalists describes the game of "follow my leader," as he watched it played by a school of minnows — a most unusual record, but not at all hard to believe, for I saw recently, from the bridge in the Boston Public Garden, a school of goldfish playing at something very much like it.

This naturalist was lying stretched out upon an old bridge, watching the minnows through a large crack between the planks, when he saw one leap out of the water over a small twig floating at the surface. Instantly another minnow broke the water and flipped

over the twig, followed by another and another, the whole school, as so many sheep, or so many children, following the leader over the twig.

The love of play seems to be one of the elemental needs of all life above the plants, and the games of

us human children seem to have been played before the dry land was, when there were only water babies in the world, for certainly the fish never learned "follow my leader" from us. Nor did my young bees learn from us their game of "prisoners' base" which they play almost every summer noontime in front of the hives. And what is the game the flies play about the cord of the drop-light in the centre of the kitchen ceiling?

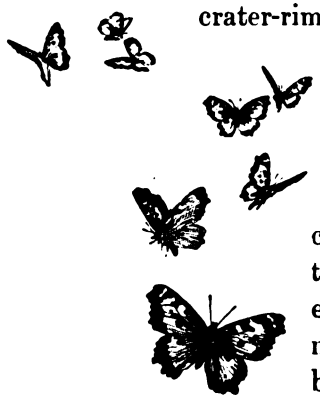
One of the most interesting animal games that I ever saw was played by a flock of butterflies on the very top of Mount Hood, whose pointed snow-piled peak looks down from the clouds over the whole vast State of Oregon.

Mount Hood is an ancient volcano, eleven thousand two hundred twenty-five feet high. Some seven thousand feet or more up, we came to "Tie-up Rock" — the place on the climb where the glacier snows lay before us and we were tied up to one another and all of us fastened by rope to the guide.

From this point to the peak, it was sheer deep snow. For the last eighteen hundred feet we clung to a rope that was anchored on the edge of the crater at the summit, and cut our steps as we climbed.

Once we had gained the peak, we lay down behind a pile of sulphurous rock, out of the way of the cutting wind, and watched the steam float up from the crater, with the widest world in view that I ever turned my eyes upon.

The draft pulled hard about the openings among the rock-piles, but hardest up a flue, or chimney, that was left in the edge of the crater-rim where parts of the rock had fallen away.



As we lay at the side of this flue, we soon discovered that butterflies were hovering about us; no, not hovering, but flying swiftly up between the rocks from somewhere down the flue. I could scarcely believe my eyes. What could any living thing be doing here? — and of all things, butterflies? This was three or four thousand feet above the last vestige of vegetation, a mere point of volcanic rock (the jagged edge-piece of an old crater) wrapped in eternal ice and snow, with sulphurous gases pouring over it, and across it blowing

a wind that would freeze as soon as the sun was out of the sky.

But here were real butterflies. I caught two or three of them and found them to be vanessas (*Vanessa californica*), a close relative of our mourning-cloak butterfly. They were all of one species, apparently, but what were they doing here?

Scrambling to the top of the piece of rock behind which I had been resting, I saw that the peak was alive with butterflies, and that they were flying — over my head, out down over the crater, and out of sight behind the peak, whence they reappeared, whirling up the flue past me on the wings of the draft that pulled hard through it, to sail down over the crater again, and again to be caught by the draft and pulled up the flue, to their evident delight, up and out over the peak, where they could again take wings, as boys take their sleds, and so down again for the fierce upward draft that bore them whirling over Mount Hood's pointed peak.

Here they were, thousands of feet above the snow-line, where there was no sign of vegetation, where the heavy vapors made the air to smell, where the very next day a wild snowstorm wrapped its frozen folds about the peak — here they were, butterflies, playing, a host of them, like so many schoolboys on the first coasting snow!

CHAPTER III

A CHAPTER OF THINGS TO SEE THIS SUMMER

I

THE dawn, the breaking dawn! I know nothing lovelier, nothing fresher, nothing newer, purer, sweeter than a summer dawn. I am just back from one — from the woods and cornfields wet with dew, the meadows and streams white with mist, and all the world of paths and fences running off into luring spaces of wavering, lifting, beckoning horizons where shrouded forms were moving and hidden voices calling. By noontime the buzz-saw of the cicada will be ripping the dried old stick of this August day into splinters and sawdust. No one could imagine that this midsummer noon at 90° in the shade could have had so Maylike a beginning.

II

I said in "The Spring of the Year" that you should see a farmer ploughing, then a few weeks later the field of sprouting corn. Now in July or August you must see that field in silk and tassel, blade and stalk standing high over your head.

You might catch the same sight of wealth in a cotton-field, if cotton is "king" in your section; or in a

vast wheat-field, if wheat is your king; or in a potato-field if you live in Maine — but no, not in a potato-field. It is all underground in a potato-field. Nor can cotton in the South, or wheat in the Northwest, give you quite the *depth* and the ranked and ordered wealth of long, straight lines of tall corn.

Then to hear a summer rain sweep down upon it and the summer wind run swiftly through it! You must see a great field of standing corn.

III

Keep out from under all trees, stand away from all tall poles, but get somewhere in the open and watch a blue-black thunderstorm come up. It is one of the wonders of summer, one of the shows of the sky, a thing of terrible beauty that I must confess I cannot look at without dread and a feeling of awe that rests like a load upon me.

"All heaven and earth are still — though not in sleep,
But breathless, as we grow when feeling most;
And silent, as we stand in thoughts too deep: —
. . . . . .
The sky is changed! — and such a change! Oh night,
And storm, and darkness, ye are wondrous strong,
Yet lovely in your strength . . . . . .
. . . . . Far along,
From peak to peak the rattling crags among,
Leaps the live thunder! Not from one lone cloud,
But every mountain now hath found a tongue,
And Jura answers, through her misty shroud,
Back to the joyous Alps who call to her aloud."

IV

But there are many smaller, individual things to be seen this summer, and among them, notable for many reasons, is a hummingbird's nest. "When completed it is scarcely larger than an English walnut and is usually saddled on a small horizontal limb of a tree or shrub frequently many feet from the ground. It is composed almost entirely of soft plant fibers, fragments of spiders' webs sometimes being used to hold them in shape. The sides are thickly studded with bits of lichen, and practiced, indeed, is the eye of the man who can distinguish it from a knot on the limb."

This is the smallest of birds' nests and quite as rare and difficult to find as any single thing that you can go out to look for. You will stumble upon one now and then; but not many in a whole lifetime. Let it be a test of your keen eye — this finding of a little hummer's nest with its two white eggs

the size of small pea-beans or its two tiny young that are up and off on their marvelous wings within three weeks from the time the eggs are laid!

V

Have you read Mr. William L. Finley's story of the California condor's nest? The hummingbird young is out and gone within three weeks; but the condor young is still in the care of its watchful parents three months after it is hatched. You ought to watch the slow, guarded youth of one of the larger hawks or owls during the summer. Such birds build very early, — before the snow is gone sometimes, — but they are to be seen feeding their young far into the summer. The wide variety in bird-life, both in size and habits, will be made very plain to you if you will watch the nests of two such birds as the hummer and the vulture or the eagle.

VI

This is the season of flowers. But what among them should you especially see? Some time ago one of the school-teachers near me brought in a list of a *dozen* species of wild orchids, gathered out of the meadows, bogs, and woods about the neighborhood. Can you do as well?

Suppose, then, that you try to find as many. They were the pink lady's-slipper; the yellow lady's-slipper; the yellow fringed-orchis (*Habenaria ciliaris*);

the ladies'-tresses, two species; the rattlesnake-plantain; arethusa, or Indian pink; calopogon, or grass pink; pogonia, or snake-mouth (*ophioglossoides* and *verticillata*); the ragged fringed-orchis; and the showy or spring orchis. Arethusa and the showy orchis really belong to the spring but the others will be task enough for you, and one that will give point and purpose to your wanderings afield this summer.

ORCHIDS

1. *Arethusa bulbosa*
2. *Pogonia ophioglossoides*
3. Pink Lady's-Slipper
4. Yellow Lady's-Slipper
5. Showy Orchis

VII

There are a certain number of moths and butterflies that you should see and know also. If one could come to know, say, one hundred and fifty flowers and the moths and butterflies that visit them (for the flower and its

insect pollen-carrier are to be thought of and studied together), one would have an excellent speaking acquaintance with the blossoming out-of-doors.

Now, among the butterflies you ought to know the mourning-cloak, or vanessa; the big red-brown milkweed butterfly; the big yellow tiger swallow-tail; the small yellow cabbage butterfly; the painted beauty; the red admiral; the common fritillary; the common wood-nymph — but I have named enough for this summer, in spite of the fact that I have not named the green-clouded or Troilus butterfly, and Asterias, the black swallowtail, and the red-spotted purple, and the viceroy.

Among the moths to see are the splendid Promethea, Cecropia, bullseye, Polyphemus, and Luna, to say nothing of the hummingbird moth, and the sphinx, or hawk, moths, especially the large one that feeds as a caterpillar upon the tomato-vines, *Ma-cros'-i-la quin-que-mac-u-la'-ta.*

VIII

There is a like list of interesting beetles and other insects, that play a large part in even *your* affairs, which you ought to watch during the summer: the honeybee, the big droning golden bumblebee, the large white-faced hornet that builds the paper nests in the bushes and trees, the gall-flies, the ichneumon-flies, the burying beetle, the tumble-bug beetle, the dragon-fly, the caddis-fly — these are only a few of

a whole world of insect folk about you, whose habits and life-histories are of utmost importance and of tremendous interest. You will certainly believe it if you will read the Peckhams' book called "Wasps, Social and Solitary," or the beautiful and fascinating insect stories by the great French entomologist Fabre. Get also "Every-day Butterflies," by Scudder; and "Moths and Butterflies," by Miss Dickerson, and "Insect Life," by Kellogg.

IX

You see I cannot stop with this list of the things. That is the trouble with summer — there is too much of it while it lasts, too much variety and abundance of life. One is simply compelled to limit one's self to some particular study, and to pick up mere scraps from other fields.

But, to come back to the larger things of the out-of-doors, you should see the mist some summer morning very early or some summer evening, sheeted and still over a winding stream or pond, especially in the evening when the sun has gone down behind the hill, the flame has faded from the sky, and over the rim of the circling slopes pours the soft, cool twilight, with a breeze as soft and cool, and a spirit that is prayer. For then from out the deep shadows of the wooded shore, out over the pond, a thin white veil will come creeping — the mist, the breath of the sleeping water, the soul of the pond!

X

You should see it rain down little toads this summer — *if you can!* There are persons who claim to have seen it. But I never have. I have stood on Maurice River Bridge, however, and apparently had them pelting down upon my feet as the big drops of the July shower struck the planks — myriads of tiny toads covering the bridge across the river! Did they rain down? No, they had been hiding in the dirt between the planks and hopped out to meet the sweet rain and to soak their little thirsty skins full.

XI

You should see a cowbird's young in a vireo's nest and the efforts of the poor deceived parents to satisfy its insatiable appetite at the expense of their own young ones' lives! Such a sight will set you to thinking.

XII

I shall not tell you what else you should see, for the whole book could be filled with this one chapter, and then you might lose your forest in your trees. The individual tree is good to look at — the mighty wide-limbed hem-

lock or pine; but so is a whole dark, solemn forest of hemlocks and pines good to look at. Let us come to the out-of-doors with our study of the separate, individual plant or thing; but let us *go on to Nature*, and not stop with the individual thing.

CHAPTER IV

THE COYOTE OF PELICAN POINT

"WE have stopped the plumers," said the game-warden, "and we are holding the market-hunters to something like decency; but there's a pot-hunter yonder on Pelican Point that I've got to do up or lose my job."

Pelican Point was the end of a long, narrow peninsula that ran out into the lake, from the opposite shore, twelve miles across from us. We were in the Klamath Lake Reservation in southern Oregon, one of the greatest wild-bird preserves in the world.

Over the point, as we drew near, the big white pelicans were winging, and among them, as our boat came up to the rocks, rose a colony of black cormorants. The peninsula is chiefly of volcanic origin, composed of crumbling rock and lava, and ends in well-stratified cliffs at the point. Patches of scraggly sagebrush grew here and there, and out near the cliffs on the sloping lava sides was a field of golden California poppies.

The gray, dusty ridge in the hot sun, with cliff swallows and cormorants and the great pouched pel-

icans as inhabitants, seemed the last place that a pot-hunter would frequent. What could a pot-hunter find here? I wondered.

We were pulling the boat up on the sand at a narrow neck in the peninsula, when the warden

touched my arm. "Up there near the sky-line among the sage! What a shot!"

I was some seconds in making out the head and shoulders of a coyote that was watching us from the top of the ridge.

"The rascal knows," went on the warden, "I have no gun; he can smell a gun clear across the lake. I have tried for three years to get that fellow. He's the terror of the whole region, and especially of the Point; if I don't get him soon, he'll clean out the pelican colony.

"Why don't I shoot him? Poison him? Trap him? I have offered fifty dollars for his hide. Why don't I? I'll show you. Now you watch the critter as I lead you up the slope toward him."

We had not taken a dozen steps when I found myself staring hard at the place where the coyote had been, but not at the coyote, for he was gone.

He had vanished before my eyes. I had not seen him move, although I had been watching him steadily.

"Queer, isn't it?" said the warden. "It's not his particular dodge, for every old coyote that has been hunted learns to work it; but I never knew one that had it down so fine as this sinner. There's next to nothing here for him to skulk behind. Why, he has given my dog the slip right here on the bare rock! But I'll fix him yet."

I did not have to be persuaded to stay overnight with the warden for the coyote-hunt the next day. The warden, I found, had fallen in with a Mr. Harris, a homesteader, who had been something of a professional coyote-hunter. Harris had just arrived in southern Oregon, and had brought with him his dogs, a long, graceful greyhound, and his fighting mate, a powerful Russian wolfhound; both were crack coyote dogs from down Saskatchewan. He had accepted the warden's offer of fifty dollars for the hide of the coyote of Pelican Point, and was now on his way round the lake.

The outfit appeared late the next day, and consisted of the two dogs, a horse and buckboard, and a big, empty dry-goods box.

I had hunted possums in the gum swamps of the South with a stick and a gunny-sack, but this rig, on the rocky, roadless shores of the lake—a dry-goods box for coyotes!—beat any hunting combination I had ever seen.

We had pitched the tent on the south shore of the point where the peninsula joined the mainland, and were finishing our supper, when not far from us, back on shore, we heard the doleful yowl of the coyote.

We were on our feet in an instant.

"There he is," said the warden, "lonesome for a little play with your dogs, Mr. Harris."

There was still an hour and a half of good light, and Harris untied his dogs. I had never seen the coyote hunted, and was greatly interested. Harris, with his dogs close in hand, led us directly away from where we had heard the coyote bark. Then we stopped and sat down. At my look of inquiry, Harris smiled.

"Oh, no, we're not after coyotes to-night, not *that* coyote, anyhow," he said. "You know a coyote is made up of equal parts of curiosity, cowardice, and craft; and it's a long hunt unless you can get a lead on his curiosity. We are not out for *him*. He sees that. In fact, we'll amble back now—but we'll manage to get up along the crest of that little ridge where he is sitting, so that the dogs can follow him whichever way he runs. You hunt coyotes wholly by sight, you know."

The little trick worked perfectly. The coyote, curious to see what we were doing, had risen to his feet, and stood, plainly outlined against the sky. He was entirely unsuspecting, and as we approached,

only edged and backed, more apparently to get a sight of the dogs behind us than through any fear.

Suddenly Harris stepped from before the dogs, pointed them toward the coyote, and slipped their leashes. The hounds were trained to the work. There was just an instant's pause, a quick yelp, then two doubling, reaching forms ahead of us, with a little line of dust between.

The coyote saw them coming, and started to run, not hurriedly, however, for he had had many a run before. He was not afraid, and kept looking behind to see what manner of dog was after him this time.

But he was not long in making up his mind that this was an entirely new kind, for in less than three minutes the hounds had halved the distance that separated him from them. At first, the big wolf-hound was in the lead. Then, as if it had taken him till this time to find all four of his long legs, the grey-hound pulled himself together, and in a burst of speed that was astonishing, passed his heavier companion.

We raced along the ridge to see the finish. But the coyote ahead of the dogs was no novice. He knew the game perfectly. He saw the gap closing behind him. Had he been young, he would have been seized by fear; would have darted right and left, mouthing and snapping in abject terror. Instead of that, he dug his nails into the shore, and with all his wits about him, sped for the desert. The greyhound was close behind him.

I held my breath. Harris, I think, would have taken his fifty dollars then and there! And the warden would have handed it to him, despite his past experience with the beast; but suddenly the coyote headed straight off for a low manzanita bush that stood up amid the scraggly sagebrush back from the shore.

The hunt was now going directly from us, with the dust and the wolfhound behind, following the line in front. The gap between the greyhound and the coyote seemed to have closed, and when the hound took the low manzanita with a bound that was half-somersault, Harris exclaimed, "He's nailed him!" and we ran ahead to see the wolfhound complete the job.

The wolfhound, however, kept right on across the desert; the greyhound lagged uncertainly far behind; in the lead, ahead of the big grizzled wolfhound, bobbed the form of a fleeing jack-rabbit!

The look of astonishment and then of disgust on Harris's face was amusing to see. The warden may have been disappointed, but he did not take any pains to repress a chuckle.

Harris said nothing. He was searching the stunted sagebrush off to the left of us. We followed his eyes, and he and the warden, both experienced plainsmen, picked out the skulking, shadowy shape of the coyote, as the creature, with belly to the ground, slunk off out of sight.

It was too late for any further attempt that night.

"An old stager, sure," Harris commented, as we

returned to camp. "Knows a trick or two for every one of mine. But I'll fix him."

Nothing was seen of the coyote all the early part of the next day, and no effort was made to find him; but toward the middle of the afternoon, Harris hitched up the bronco, and, unpacking a flat package in the bottom of the buckboard, showed us a large glass window, which he fitted as a door into one end of the big dry-goods box. Then into the glass-ended box he put the two hounds.

"Now, gentlemen," he said, "I'm going to invite you to take a sight-seeing trip on this auto out into the sagebrush. Incidentally, if you chance to see a coyote, don't mention it."

If all the coyotes, jack-rabbits, gophers, and pelicans of the territory had come out to see us thump and bump over the dry, uneven desert, I should not have been surprised; and so, on coming back to camp, it was with no wonder at all that I discovered the coyote, out on the point, staring at us from across the neck of the peninsula. Nothing like this had happened on his side of the lake before.

Harris saw him instantly, and was quick to recognize our advantage. We had the coyote cornered — out on the long, narrow peninsula, where the dogs must run him down. The wily creature had so far forgotten himself as to get caught between us and the ridge alongshore, and, partly in curiosity, had kept running ahead and stopping to look at us, until

now he was past the place where he could skulk back without our seeing him, into the open plain.

Even yet all depended upon our getting so close to him that the dogs could keep him constantly in sight. The crumbling ledges at the end of the point were full of holes and crevices into which the beast could dodge.

We were not close enough, however. With one of us watching the coyote, should he happen to run, Harris turned the bronco slowly round until the glass end of the box in the back of the buckboard was pointing directly at the creature. There was a scramble of feet inside the box. The dogs had sighted the beast. Then Harris started as if to drive away, the coyote watching us all the time.

Instead of driving off, he made a circle, and coming back slowly toward the coyote, gained the top of a little knoll. Had the coyote seen the dogs in the box, he would have vanished instantly; but the box interested and puzzled him.

He stood looking with all his eyes as the procession turned, and once more the glass end of the box was pointed directly toward him. The dogs evidently knew what was expected of them. They were silent, but ready. Suddenly, without stopping the pony, Harris pulled open the glass door, and yelled, "Go!"

And go they did. I never saw hundred-yard runners leap from the mark as those two hounds leaped from that box. The coyote, in his astonishment, act-

ually turned a back handspring and started for the point.

The dogs were hardly two hundred yards behind him, and were making short work of the space between. It seemed hardly fair, and I must say that I felt something like sympathy for the under dog, wild dog though he was; the odds against him were so great.

But the coyote knew his track thoroughly, and was taking advantage of the rough, loose, shelving ground. For the farther out toward the end of the point they ran, the narrower, rockier, and steeper grew the peninsula, the more difficult and dangerous the footing.

The coyote slanted along the side of the ridge, and took a sloping slab of rock ahead of him with a slow side-step and a climb that brought the dogs close up behind him. They took the rock at a leap, slid halfway across, and scrambling, rolled several yards down the slope — and lost all the gain they had made.

Things began to even up. The chase began to be interesting. Here judgment was called for, as well as speed. The cliff swallows swarmed out of their nests under the overhanging rocks; the black cormorants and great-winged pelicans saw their old enemy coming, and rose, flapping, over the water; the circling gulls dropped low between the runners; their strange clangor and the stranger tropical shapes thick in

the air gave the scene a wildness altogether new to me.

On fled the coyote; on bounded the dogs. He would never escape! Nothing without wings could ever do it! Mere feet could never stand such a test! The chances that pursued and pursuers took — the leaps — the landings! The whole slope seemed rolling with stones, started by the feet of the runners.

They were nearing the high, rough rocks of the tip of the point. Between them and the ledges of the point, and reaching from the edge of the water nearly to the top of the ridge, lay the steep golden garden of California poppies, blooming in the dry lava soil that had crumbled and drifted down on the rocky side.

The coyote veered, and dashed down toward the middle of the poppies; the hounds hit the bed two jumps behind. There was a cloud of dust, and in it we saw an avalanche of dogs ploughing a wide furrow through the flowers nearly down to the water. Climbing slowly out near the upper edge of the bed was the coyote, again with a good margin of lead.

But the beast was at the end of the point, and nearing the end of his race. Had we been out of the way, he might have turned and yet given the dogs the slip — for behind us lay the open desert.

Straight toward the rocks he headed, with the hounds laboring up the slope after him. He was

running to the very edge of the point, as if he were intending to leap off the cliff to death in the lake below, and I saw Harris's face tighten as his hounds topped the ridge, and senselessly tore on toward the same fearful edge. But the race was not done yet. The coyote hesitated, turned down the ledges on the south slope, and leaping in among the cormorant nests, started back toward us.

He was surer on his feet than were the hounds, but this hesitation on the point had cost him several yards. The hounds would pick him up in the little cove of smooth, hard sand that lay, encircled by rough rocks, just ahead, unless — no, he must cross the cove, he must take the stretch. He was taking it — knowingly, too, and with a burst of power that he had not shown upon the slopes. He was flinging away his last reserve.

The hounds were nearly across; the coyote was within fifty feet of the boulders, when the greyhound, lowering his long, flat head, lunged for the spine of his quarry.

The coyote heard him coming, spun on his fore feet, offering his fangs to those of his foe, and threw himself backward just as the jaws of the wolfhound clashed at him and flecked his throat with foam.

The two great dogs collided and bounded wide apart, startling a jack rabbit that dived between them into a hole among the rocks. The coyote, on his feet in an instant, caught the motion of the rabbit, and

like his shadow, leaped into the air after him for the hole.

He was as quick as thought, quicker than either of the hounds. He sprang high over them, — safely over them, we thought, — when, in mid-air, at the turn of the dive, he twisted, heeled half-over, and landed hard against the side of the hole; and the wolfhound pulled him down.

It was over; but there was something strange, almost unfair, it seemed, about the finish.

Before we got down to the cove both of the dogs had slunk back, cowering from the dead coyote. Then there came to us the buzz of a rattlesnake — a huge, angry reptile that lay coiled in the mouth of the hole. The rabbit had struck and roused the snake. The coyote in his leap had caught the warning whir, but caught it too late to clear both snake and hounds. His twist in the air to clear the snake had cost him his life. So close is the race in the desert world.

CHAPTER V

FROM T WHARF TO FRANKLIN FIELD

OVER and over I read the list of saints and martyrs on the wall across the street, thinking dully how men used to suffer for their religion, and how, nowadays, they suffer for their teeth. For I was reclining in a dentist's chair, blinking through the window at the Boston Public Library, seeing nothing, however, nothing but the tiles on the roof, and the names of Luther, Wesley, Wycliffe, graven on the granite wall, while the dentist burred inside of my cranium and bored down to my toes for nerves. So, at least, it seemed.

By and by my gaze wandered blankly off to the square patch of sky in sight above the roof. A black cloud was driving past in the wind away up there. Suddenly a white fleck swept into the cloud, careened, spread two wide wings against it, and rounded a circle. Then another and another, until eight herring gulls were soaring white against the sullen cloud in that little square of sky high over the roofs of Boston.

Was this the heart of a vast city? Could I be in a dentist's chair? There was no doubt about the chair; but how quickly the red-green roof of the Li-

brary became the top of some great cliff; the droning noise of traffic in the streets, the wash of waves against the rocks; and yonder on the storm-stained sky those wheeling wings, how like the winds of the ocean, and the raucous voices, how they seemed to fill all the city with the sweep and the sound of the sea!

Boston, Baltimore, New York, Philadelphia, Chicago, San Francisco — do you live in any one of them or in any other city? If you do, then you have a surprisingly good chance to watch the ways of wild things and even to come near to the heart of Nature. Not so good a chance, to be sure, as in the country; but the city is by no means so lacking in wild life or so shunned by the face of Nature as we commonly believe.

All great cities are alike, all of them very different, too, in details; Boston's streets, for instance, being crookeder than most, but like them all, reaching out for many a mile before they turn into country roads and lanes with borders of quiet and wide green fields.

But Boston has the wide waters of the Harbor and the Charles River Basin. And it also has T Wharf! They did not throw the tea overboard there, back in Revolutionary days, as you may be told, but T Wharf is famous, nevertheless, famous for fish!

Fish? Swordfish and red snappers, scup, shad,

squid, squeteague, sharks, skates, smelts, sculpins, sturgeon, scallops; halibut, haddock, hake — to say nothing of mackerel, cod, and countless freak things caught by trawl and seine all the way from Boston Harbor to the Grand Banks! I have many a time sat on T Wharf and caught short, flat flounders with my line. It is almost as good as a trip to the Georges in the "We're Here" to visit T Wharf; and then to walk slowly up through Quincy Market. Surely no single walk in the woods will yield a tithe of the life to be found here, and found only here for us, brought as the fish and game and fruits have been from the ends of the earth and the depths of the sea.

There is no reason why city children should not know a great deal about animal life, nor why the teachers in city schools should feel that nature study is impossible for them. For, leaving the wharf with its fish and gulls and fleet of schooners, you come up four or five blocks to old King's Chapel Burying-Ground where the Boston sparrows roost. Boston is full of interesting sights, but none more interesting to the bird-lover than this sparrow-roost. The great bird rocks in the Pacific, described in another chapter of this book, are larger, to be sure, yet hardly more clamorous when, in the dusk, the sparrow clans begin to gather; nor hardly wilder than this city roost when the night lengthens, and the quiet creeps down the alleys and along the empty streets, and the sea winds stop on the corners, and the lamps,

like low-hung stars, light up the sleeping birds till their shadows waver large upon the stark walls about the old graveyard that break far overhead as rim rock breaks on the desert sky.

Now shift the scene to an early summer morning on Boston Common, two blocks farther up, and on to the Public Garden across Charles Street. There are more wild birds to be seen in the Garden on a May morning than there are here in the woods of Hingham, and the summer still finds some of them about the shrubs and pond. And it is an easy place in which to watch them. One of our bird-students has found over a hundred species in the Garden. Can any one say that the city offers a poor chance for nature-study?

This is the story of every great city park. My friend Professor Herbert E. Walter found nearly one hundred and fifty species of birds in Lincoln Park, Chicago. And have you ever read Mr. Bradford Torrey's delightful essay called "Birds on Boston Common"?

Then there are the squirrels and the trees on the Common; the flowers, bees, butterflies, and even the schools of goldfish, in the pond of the Garden — enough of life, insect-life, plant-life, bird-life, fish-life, for more than a summer of lessons.

Nor is this all. One block beyond the Garden stands the Natural History Museum, crowded with mounted specimens of birds and beasts, reptiles,

fishes, and shells beyond number,—more than you can study, perhaps. You city folk, instead of having too little, have altogether too much of too many things. But such a museum is always a suggestive place for one who loves the out-of-doors. And the more one knows of nature, the more one gets out of the museum. You can carry there, and often answer, the questions that come to you in your tramps afield, in your visits to the Garden, and in your reading of books. Then add to this the great Agassiz Museum at Harvard University, and the Aquarium at South Boston, and the Zoölogical Gardens at Franklin Park, and the Arnold Arboretum — all of these with their multitude of mounted specimens and their living forms for *you!* For me also; and in from the country I come, very often, to study natural history in the city.

What is true of Boston is true of every city in some degree. The sun and the moon and stars shine upon the city as upon the country, and during my years of city life (I lived in the very heart of Boston) it was my habit to climb to my roof, above the din and glare of the crowded street, and here among the chimney-pots to lie down upon my back, the city far below me, and overhead the blue sky, the Milky Way, the constellations, or the moon, swinging —

> "Through the heaven's wide pathless way,
> And oft, as if her head she bowed
> Stooping through a fleecy cloud."

Here, too, I have watched the gulls that sail over the Harbor, especially in the winter. From this outlook I have seen the winging geese pass over, and heard the faint calls of other migrating flocks, voices that were all the more mysterious for their falling through the muffling hum that rises from the streets and spreads over the wide roof of the city as a soft night wind over the peaked roofs of a forest of firs.

ARGIOPE, THE MEADOW SPIDER

Strangely enough here on the roof I have watched the only nighthawks that I have ever found in Massachusetts. This is surely the last place you would expect to find such wild, spooky, dusk-loving creatures as nighthawks. Yet here, on the tarred and pebbled roofs, here among the whirling, squeaking, smoking chimney-pots, here above the crowded, noisy streets, these birds built their nests, — laid their eggs, rather, for they build no nests, — reared their young, and in

the long summer twilight rose and fell through the smoky air, uttering their peevish cries and making their ghostly booming sounds with their high-diving, just as if they were out over the darkening swales along some gloomy swamp-edge.

For many weeks I had a big tame spider in the corner of my study there in that city flat, and I have yet to read an account of all the species of spiders to be found dwelling within the walls of any great city. Even Argiope of the meadows is doubtless found in the Fens. Not far away from my flat, down near the North Station, one of my friends on the roof of his flat kept several hives of bees. They fed on the flowers of the Garden, on those in dooryards, and on the honey-yielding lindens which stand here and there throughout the city. Pigeons and sparrows built their nests within sight of my windows; and by going early to the roof I could see the sun rise, and in the evening I could watch it go down behind the hills of Belmont as now I watch it from my lookout here on Mullein Hill.

One is never far from the sky, nor from the earth, nor from the free, wild winds, nor from the wilder night that covers city and sea and forest with its quiet, and fills them all with lurking shadows that never shall be tamed.

CHAPTER VI

A CHAPTER OF THINGS TO HEAR THIS SUMMER

I

THE fullness, the flood, of life has come, and, contrary to one's expectations, a marked silence has settled down over the waving fields and the cool deep woods. I am writing these lines in the lamplight, with all the windows and doors open to the dark July night. The summer winds are moving in the trees. A cricket and a few small green grasshoppers are chirping in the grass; but nothing louder is near at hand. And nothing louder is far off, except the cry of the whip-poor-will in the wood road. But him you hear in the spring and autumn as well as in the summer. Ah, listen! My tree-toad in the grapevine over the bulkhead door!

This is a voice you must hear—on cloudy summer days, toward twilight, and well into the evening. Do you know what it is to feel lonely? If you do, I think, then, that you know how the soft, far-off, eerie cry of the tree-toad sounds. He is prophesying rain, the almanac people think, but I think it is only the sound of rain in his voice, summer rain after a long drouth, cooling, reviving, soothing rain, with just a

patter of something in it that I cannot describe, something that I used to hear on the shingles of the garret over the rafters where the bunches of horehound and catnip and pennyroyal hung.

II

You ought to hear the lively clatter of a mowing-machine. It is hot out of doors; the roads are beginning to look dusty; the insects are tuning up in the grass, and, like their chorus all together, and marching round and round the meadow, moves the mower's whirring blade. I love the sound. Haying is hard, sweet work. The farmer who does not love his haying ought to be made to keep a country store and sell kerosene oil and lumps of dead salt pork out of a barrel. He could not appreciate a live, friendly pig.

Down the long swath sing the knives, the cogs click above the square corners, and the big, loud thing sings on again, — the song of "first-fruits," the first great ingathering of the season, — a song to touch the heart with joy and sweet solemnity.

III

You ought to hear the Katydids — two of them on the trees outside your window. They are not saying "Katy did," nor singing "Katy did"; they are fiddling "Katy did," "Katy did n't" — by rasping the fore wings.

Is the sound "Katy" or "Katy did"? or what is said? Count the notes. Are they at the rate of two hundred per minute? Watch the instrumentalist — till you make sure it is the male who is wooing Katy with his persistent guitar. The male has no long ovipositors.

IV

Another instrumentalist to hear is the big cicada or "harvest-fly." There is no more characteristic sound of all the summer than his big, quick, startling whirr — a minute mowing-machine up on the limb overhead! Not so minute either, for the creature is fully two inches long, with bulging eyes and a click to his wings when he flies that can be heard a hundred feet away! "Dog-days-z-z-z-z-z-z-z" is the song he sings to me.

"FLITTING AND WAVERING ABOUT"

V

This is the season of small sounds. As a test of the keenness of your ears go out at night into some open glade in the woods or by the side of some pond and listen for the squeaking of the bats flitting and wavering above in the uncertain light over your head. You will need a stirless midsummer dusk; and if you can hear the thin, fine squeak as the creature dives near your head, you may be sure your ears are almost as keen as those of the fox. The sound is not audible to most human ears.

VI

Another set of small sounds characteristic of midsummer is the twittering of the flocking swallows in the cornfields and upon the telegraph-wires. This summer I have had long lines of the young birds and their parents from the old barn below the hill strung on the wires from the house across the lawn. Here they preen while some of the old birds hawk for flies, the whole line of them breaking into a soft little twitter each time a newcomer alights among them. One swallow does not make a summer, but your electric light wires sagging with them is the very soul of the summer.

VII

In the deep, still woods you will hear the soft call of the robin — a low, pensive, plaintive note unlike

its spring cry or the after-shower song. It is as if the voice of the slumberous woods were speaking, — without alarm, reproach, or welcome either. It is an invitation to stretch yourself on the deep moss and let the warm shadows of the summer woods steal over you with sleep.

THE RED-EYED VIREO

And this, too, is a thing to learn. Doing something, hearing something, seeing something by no means exhausts our whole business with the out-of-doors. To lie down and do nothing, to be able to keep silence and to rest on the great whirling globe is as needful as to know everything going on about us.

VIII

There is one bird-song so characteristic of midsummer that I think every lover of the woods must know it: the oft-repeated, the constant notes of the red-eyed vireo or "preacher." Wilson Flagg says of him: "He takes the part of a deliberative orator who explains his subject in a few words and then makes a pause for his hearers to reflect upon it. We might suppose him to be repeating moderately with a pause between each sentence, 'You see it — you know it — do you hear me? — do you believe it?' All these strains are delivered with a rising inflection at the close, and with a pause, as if waiting for an answer."

IX

A few other bird-notes that are associated with hot days and stirless woods, and that will be worth your hearing are the tree-top song of the scarlet tanager. He is one of the summer sights, a dash of the burning tropics is his brilliant scarlet and jet black, and his song is a loud, hoarse, rhythmical carol that has the flame of his feathers in it and the blaze of the sun. You will know it from the cool, liquid song of the robin both by its peculiar quality and because it is a short song, and soon ended, not of indefinite length like the robin's.

Then the peculiar, coppery, reverberating, or

confined song of the indigo bunting — as if the bird were singing inside some great kettle.

One more — among a few others — the softly falling, round, small, upward-swinging call of the wood pewee. Is it sad? Yes, sad. But sweeter than sad, — restful, cooling, and inexpressibly gentle. All day long from high above your head and usually quite out of view, the voice — it seems hardly a voice — breaks the long silence of the summer woods.

X

When night comes down with the long twilight there sounds a strange, almost awesome *quawk* in the dusk over the fields. It sends a thrill through me, notwithstanding its nightly occurrence all through July and August. It is the passing of a pair of night herons — the black-crowned, I am sure, although this single pair only fly over. Where the birds are numerous they nest in great colonies.

It is the wild, eerie *quawk* that you should hear, a far-off, mysterious, almost uncanny sound that fills the twilight with a vague, untamed something, no matter how bright and civilized the day may have been.

XI

From the harvest fields comes the sweet whistle of Bob White, the clear, round notes rolling far through the hushed summer noon; in the wood-lot the

crows and jays have already begun their cawings and screamings that later on become the dominant notes of the golden autumn. They are not so loud and characteristic now because of the insect orchestra throbbing with a rhythmic beat through the air. So wide, constant, and long-continued is this throbbing note of the insects that by midsummer you almost cease to notice it. But stop and listen — field crickets, katydids, long-horned grasshoppers, snowy tree-crickets: *chwĭ-chwĭ-chwĭ-chwĭ — thrr-r-r-r-r-r-r — crrri-crrri-crrri-crrri — gru-gru-gru-gru — retreat-retreat-retreat-treat-treat* — like the throbbing of the pulse.

XII

One can do no more than suggest in a short chapter like this; and all that I am doing here is catching for you some of the still, small voices of *my* summer. How unlike those of your summer they may be I can easily imagine, for you are in the Pacific Coast, or off on the vast prairies of Canada, or down in the sunny fields and hill-country of the South.

I have done enough if I have suggested that you stop and listen; for after all it is having ears which hear *not* that causes the trouble. Hear the voices that make your summer vocal — the loud and still voices which alike pass unheeded unless we pause to hear.

As a lesson in listening, go out some quiet evening, and as the shadows slip softly over the surface of the wood-walled pond, listen to the breathing of the fish as they come to the top, and the splash of the muskrats, or the swirl of the pickerel as he ploughs a furrow through the silence.

CHAPTER VII

THE SEA-BIRDS' HOME

AFTER my wandering for years among the quiet lanes and along the winding cow-paths of the home fields, my trip to the wild-bird rocks in the Pacific Ocean, as you can imagine, was a thrilling experience. We chartered a little launch at Tillamook, and, after a fight of hours and hours to cross Tillamook Bar at the mouth of the bay, we got out upon the wide Pacific, and steamed down the coast for Three-Arch Rocks, which soon began to show far ahead of us just off the rocky shore.

I had never been on the Pacific before, nor had I ever before seen the birds that were even now beginning to dot the sea and to sail over and about us as we steamed along. It was all new, so new that the very water of the Pacific looked unlike the familiar water of the Atlantic. And surely the waves were different,— longer, grayer, smoother, with an immensely mightier heave. At least they seemed so, for every time we rose on the swell, it was as if our boat were in the hand of Old Ocean, and his mighty arm were "putting" us, as the athlete "puts" the shot. It was all new and strange and very wild to me, with the wild cries of the sea-birds already

beginning to reach us as flocks of the birds passed around and over our heads.

The fog was lifting. The thick, wet drift that had threatened our little launch on Tillamook Bar stood clear of the shouldering sea to the westward, and in over the shore, like an upper sea, hung at the fir-girt middles of the mountains, as level and as gray as the sea below. There was no breeze. The long, smooth swell of the Pacific swung under us and in, until it whitened at the base of the three rocks that rose out of the sea in our course, and that now began to take on form in the foggy distance. Gulls were flying over us, lines of black cormorants and crowds of murres were winging past, but we were still too far away from the looming rocks to see that the gray of their walls was the gray of uncounted colonies of nesting birds, colonies that covered their craggy steeps as, on shore, the green firs clothed the slopes of the Coast Range Mountains up to the hanging fog.

As we ran on nearer, the sound of the surf about the rocks became audible, the birds in the air grew more numerous, their cries now faintly mingling with the sound of the sea. A hole in the side of the middle Rock, a mere fleck of foam it seemed at first, widened rapidly into an arching tunnel through which our boat might run; the swell of the sea began to break over half-sunken ledges; and soon upon us fell the damp shadows of the three great rocks, for now we were looking far up at their sides, where we could

see the birds in their guano-gray rookeries, rookery over rookery, — gulls, cormorants, guillemots, puffins, murres, — encrusting the sides from tide-line to pinnacles, as the crowding barnacles encrusted the bases from the tide-line down.

TUFTED PUFFINS

We had not approached without protest, for the birds were coming off to meet us, wheeling and clacking overhead, the nearer we drew, in a constantly thickening cloud of lowering wings and tongues. The clamor was indescribable, the tossing flight enough to make one mad with the motion of wings. The air was filled, thick, with the whirling and the screaming, the clacking, the honking, close to our ears, and high up in the peaks, and far out over the waves. Never had I been in this world before. Was I on my earth? or had I suddenly wakened up in some old sea world where there was no dry land, no life but this?

We rounded the outer or Shag Rock and headed slowly in opposite the yawning hole of the middle Rock as into some mighty cave, so sheer and shadowy rose the walls above us, — so like to cavern thunder was the throbbing of the surf through the hollow arches, was the flapping and screaming of the birds

against the high circling walls, was the deep, menacing grumble of the bellowing sea-lions, as, through the muffle of surf and sea-fowl, herd after herd lumbered headlong into the foam.

It was a strange, wild scene. Hardly a mile from the Oregon coast, but cut off by breaker and bar from the abrupt, uninhabited shore, the three rocks of the Reservation, each pierced with its resounding arch, heaved their huge shoulders from the waves straight up, high, towering, till our little steamer coasted their dripping sides like some puffing pygmy.

Each rock was perhaps as large as a solid city square and as high as the tallest of sky-scrapers; immense, monstrous piles, each of them, and run through by these great caverns or arches, dim, dripping, filled with the noise of the waves and the beat of thousands of wings.

They were of no part or lot with the dry land. Their wave-scooped basins were set with purple starfish and filled with green and pink anemones, and beaded many deep with mussels of amethyst and jet that glittered in the clear beryl waters; and, above the jeweled basins, like fabled beasts of old, lay the sea-lions, uncouth forms, flippered, reversed in shape, with throats like the caves of Æolus, hollow, hoarse, discordant; and higher up, on every jutting bench and shelf, in every weathered rift, over every jog of the ragged cliffs, to their bladed backs and pointed peaks, swarmed the sea-birds, webfooted, amphibious,

shaped of the waves, with stormy voices given them by the winds that sweep in from the sea.

As I looked up at the amazing scene, at the mighty rocks and the multitude of winging forms, I seemed to see three swirling piles of life, three cones that rose like volcanoes from the ocean, their sides covered with living lava, their craters clouded with the smoke of wings, while their bases seemed belted by the rumble of a multi-throated thunder. The very air was dank with the smell of strange, strong volcanic gases, — no breath of the land, no odor of herb, no scent of fresh soil; but the raw, rank smells of rookery and den, saline, kelpy, fetid; the stench of fish and bedded guano, and of the reeking pools where the sea-lion herds lay sleeping on the lower rocks in the sun.

A boat's keel was beneath me, but as I stood out on the pointed prow, barely above the water, and found myself thrust forward without will or effort among the crags and caverns, among the shadowy walls, the damps, the smells, the sounds, among the bellowing beasts in the churning waters about me, and into the storm of wings and tongues in the whirling air above me, I passed from the things I had known, and the time and the earth of man, into a monstrous period of the past.

This was the home of the sea-birds. Amid all the din we landed from a yawl and began our climb toward the top of Shag Rock, the outermost of the

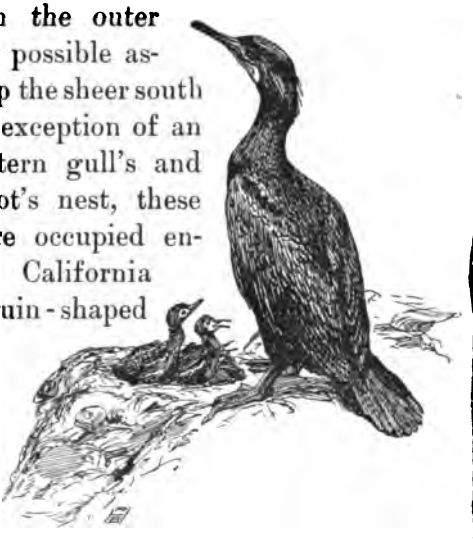
three. And here we had another and a different sight of the wild life. It covered every crag. I clutched it in my hands; I crushed it under my feet; it was thick in the air about me. My narrow path up the face of the rock was a succession of sea-bird rookeries, of crowded eggs, and huddled young, hairy or naked or wet from the shell. Every time my fingers felt for a crack overhead they touched something warm that rolled or squirmed; every time my feet moved under me, for a hold, they pushed in among top-shaped eggs that turned on the shelf or went over far below; and whenever I hugged the pushing wall I must bear off from a mass of squealing, struggling, shapeless things, just hatched. And down upon me, as rookery after rookery of old birds whirred in fright from their ledges, fell crashing eggs and unfledged young, that the greedy gulls devoured ere they touched the sea.

I was midway in the climb, at a bad turn round a point, edging inch by inch along, my face pressed against the hard face of the rock, my feet and fingers gripping any crack or seam they could feel, when out of the deep space behind me I caught the swash of waves. Instantly a cold hand seemed to clasp me from behind.

I flattened against the rock, my whole body, my very mind clinging desperately for a hold, — a falling fragment of shale, a gust of wind, the wing-stroke of a frightened bird, enough to break the hold and

swing me out over the water, washing faint and far below. A long breath, and I was climbing again.

We were on the outer Rock, our only possible ascent taking us up the sheer south face. With the exception of an occasional Western gull's and pigeon guillemot's nest, these steep sides were occupied entirely by the California murres, — penguin-shaped birds about the size of a small wild duck, chocolate-brown above, with white breasts, — which literally covered the sides of the three great rocks wherever they could find a hold. If a million meant anything, I should say there were a million murres nesting on this outer Rock; not nesting either, for the egg is laid upon the bare ledge, as you might place it upon a mantel, — a single sharp-pointed egg, as large as a turkey's, and just as many of them on the ledge as there is standing-room for the birds. The murre broods her very large egg by standing straight up over it, her short legs, by dint of stretching, allowing her to straddle it, her short tail propping her securely from behind.



BRANDT'S CORMORANT

On, up along the narrow back, or blade, of the rock, and over the peak, were the well-spaced nests of the Brandt's cormorants, nests the size of an ordinary straw hat, made of sea-grass and the yellow-flowered sulphur-weed that grew in a dense mat over the north slope of the top, each nest holding four long, dirty blue eggs or as many black, shivering young; and in the low sulphur-weed, all along the roof-like slope of the top, built the gulls and the tufted puffins; and, with the burrowing puffins, often in the same holes, were found the Kaeding's petrels; while down below them, as up above them, — all around the rock-rim that dropped sheer to the sea, — stood the cormorants, black, silent, statuesque; and everywhere were nests and eggs and young, and everywhere were flying, crying birds — above, about, and far below me, a whirling, whirring vortex of wings that had caught me in its funnel.

CHAPTER VIII

THE MOTHER MURRE

I HEAR the bawling of my neighbor's cow. Her calf was carried off yesterday, and since then, during the long night, and all day long, her insistent woe has made our hillside melancholy. But I shall not hear her to-night, not from this distance. She will lie down to-night with the others of the herd, and munch her cud. Yet, when the rattling stanchions grow quiet and sleep steals along the stalls, she will turn her ears at every small stirring; she will raise her head to listen and utter a low, tender *moo*. Her full udder hurts; but her cud is sweet. She is only a cow.

Had she been a wild cow, or had she been out with her calf in a wild pasture, the mother-love in her would have lived for six months. Here in the barn she will be forced to forget her calf in a few hours, and by morning her mother-love shall utterly have died.

There is a mother-principle alive in all nature that never dies. This is different from mother-love. The oak tree responds to the mother-principle, and bears acorns. It is a law of life. The mother-love or passion, on the other hand, occurs only among the higher

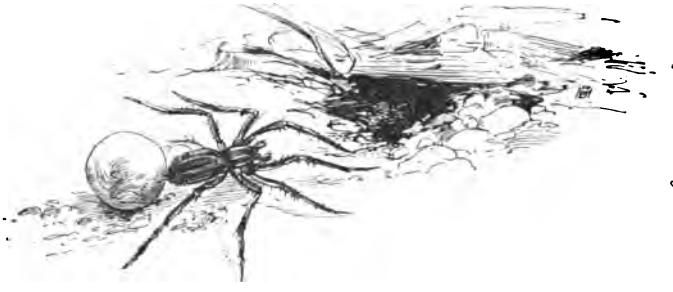
animals. It is very common; and yet, while it is one of the strongest, most interesting, most beautiful of animal traits, it is at the same time the most individual and variable of all animal traits.

This particular cow of my neighbor's that I hear lowing, is an entirely gentle creature ordinarily, but with a calf at her side she will pitch at any one who approaches her. And there is no other cow in the herd that mourns so long after her calf. The mother in her is stronger, more enduring, than in any of the other nineteen cows in the barn. My own cow hardly mourns at all when her calf is taken away. She might be an oak tree losing its acorns, or a crab losing her hatching eggs, so far as any show of love is concerned.

The female crab attaches her eggs to her swimmerets and carries them about with her for their protection as the most devoted of mothers; yet she is no more conscious of them, and feels no more for them, than the frond of a cinnamon fern feels for its spores. She is a mother, without the love of the mother.

In the spider, however, just one step up the animal scale from the crab, you find the mother-love or passion. Crossing a field the other day, I came upon a large female spider of the hunter family, carrying a round white sack of eggs, half the size of a cherry, attached to her spinnerets. Plucking a long stem of grass, I detached the sack of eggs without bursting it. Instantly the mother turned and sprang at the

grass-stem, fighting and biting until she got to the sack, which she seized in her strong jaws and made off with as fast as her long, rapid legs would carry her.



I laid the stem across her back and again took the sack away. She came on for it, fighting more fiercely than before. Once more she seized it; once more I forced it from her jaws, while she sprang at the grass-stem and tried to tear it to pieces. She must have been fighting for two minutes when, by a regrettable move on my part, one of her legs was injured. She did not falter in her fight. On she rushed for the sack as fast as I pulled it away. She would have fought for that sack, I believe, until she had not one of her eight legs to stand on, had I been cruel enough to compel her. It did not come to this, for suddenly the sack burst, and out poured, to my amazement, a myriad of tiny brown spiderlings. Before I could think what to do that mother spider had rushed among them and caused them to swarm upon her, covering her, many deep, even to

the outer joints of her long legs. I did not disturb her again, but stood by and watched her slowly move off with her encrusting family to a place of safety.

I had seen these spiders try hard to escape with their egg-sacks before, but had never tested the strength of their purpose. For a time after this experience I made a point of taking the sacks away from every spider I found. Most of them scurried off to seek their own safety; one of them dropped her sack of her own accord; some of them showed reluctance to leave it; some of them a disposition to fight; but none of them the fierce, consuming mother-fire of the one with the hurt leg.

Among the fishes, much higher animal forms than the spiders, we find the mother-love only in the *males*. It is the male stickleback that builds the nest, then goes out and *drives* the female in to lay her eggs, then straightway drives her out to prevent her eating them, then puts himself on guard outside the nest to protect them from other sticklebacks and

other enemies, until the young shall hatch and be able to swim away by themselves. Here he stays for a month, without eating or sleeping, so far as we know.

It is the male toadfish that crawls into the nest-hole and takes charge of the numerous family. He may dig the hole, too, as the male stickleback builds the nest. I do not know as to that. But I have raised many a stone in the edge of the tide along the shore of Naushon Island in Buzzard's Bay, to find the under surface covered with round, drop-like, amber eggs, and in the shallow cavity beneath, an old male toadfish, slimy and croaking, and with a countenance ugly enough to turn a prowling eel to stone. The female deposits the eggs, glues them fast with much nicety to the under surface of the rock, as a female might, and finishes her work. Departing at once, she leaves the coming brood to the care of the male, who from this time, without relief or even food in all probability, assumes the rôle and all the responsibilities of mother, and must consequently feel all the mother-love.

Something like this is true of the common horn-pout, or catfish, I believe, though I have never seen it recorded, and lack the chance at present of proving my earlier observations. I think it is father catfish that takes charge of the brood, of the swarm of kitten catfish, from the time the spawn is laid.

A curious sharing of mother qualities by male and female is shown in the Surinam toads of South America, where the male, taking the newly deposited eggs, places them upon the back of the female. Here, glued fast by their own adhesive jelly, they are soon surrounded by cells grown of the skin of the back, each cell capped by a lid. In these cells the eggs hatch, and the young go through their metamorphoses, apparently absorbing some nourishment through the skin of their mother. Finally they break through the lids of their cells and hop away. They might as well be toadstools upon a dead stump, so far as motherly care or concern goes, for, aside from allowing the male to spread the eggs upon her back, she is no more a mother to them than the dead stump is to the toadstools. She is host only to the little parasites.

I do not know of any mother-love among the reptiles. The mother-passion, so far as my observation goes, plays no part whatever in the life of reptiles. Whereas, passing on to the birds, the mother-passion becomes by all odds the most interesting thing in bird-life.

And is not the mother-passion among the mammals even more interesting? It is as if the watcher in the woods went out to see the mother animal only. It is her going and coming that we follow; her faring, foraging, and watch-care that let us deepest into the secrets of wild animal life.

On one of the large estates here in Hingham, a few weeks ago, a fox was found to be destroying poultry. The time of the raids, and their boldness, were proof enough that the fox must be a female with young. Poisoned meat was prepared for her, and at once the raids ceased. A few days later one of the workmen of the estate came upon the den of a fox, at the mouth of which lay dead a whole litter of young ones. They had been poisoned. The mother had not eaten the prepared food herself, but had carried it home to her family. They must have died in the burrow, for it was evident from the signs that she had dragged them into the fresh air to revive them, and deposited them gently on the sand by the hole. Then in her perplexity she had brought various tidbits of mouse and bird and rabbit, which she placed at their noses to tempt them to wake up out of their strange sleep and eat. No one knows how long she watched beside the lifeless forms, nor what her emotions were. She must have left the neighborhood soon after, however, for no one has seen her since about the estate.

The bird mother is the bravest, tenderest, most appealing thing one ever comes upon in the fields. It is the rare exception, but we sometimes find the real mother wholly lacking among the birds, as in the case of our notorious cowbird, who sneaks about, watching her chance, when some smaller bird is gone, to drop her egg into its nest. The egg must

be laid, the burden of the race has been put upon the bird, but not the precious burden of the child. She lays eggs; but is not a mother.

The same is true of the European cuckoos, but not quite true, in spite of popular belief, of our American cuckoos. For our birds (both species) build rude, elementary nests as a rule, and brood their eggs. Occasionally they may use a robin's or a catbird's nest, in order to save labor. So undeveloped is the mother in the cuckoo that if you touch her eggs she will leave them — abandon her rude nest and eggs as if any excuse were excuse enough for an escape from the cares of motherhood. How should a bird with so little mother-love ever learn to build a firm-walled, safe, and love-lined nest?

The great California condor is a most faithful and anxious mother; the dumb affection of both parent birds, indeed, for their single offspring is pathetically human. On the other hand, the mother in the turkey buzzard is so evenly balanced against the vulture in her that I have known a brooding bird to be so upset by the sudden approach of a man as to rise from off her eggs and devour them instantly, greedily, and make off on her serenely soaring wings into the clouds.

Such mothers, however, are not the rule. The buzzard, the cuckoo, and the cowbird are the striking exceptions. The flicker will keep on laying eggs

as fast as one takes them from the nest-hole, until she has no more eggs to lay. The quail will sometimes desert her nest if even a single egg is so much as touched, but only because she knows that she has been discovered and must start a new nest, hidden in some new place, for safety. She is a wise and devoted mother, keeping her brood with her as a "covey" all winter long.

One of the most striking cases of mother-love which has ever come under my observation, I saw in the summer of 1912 on the bird rookeries of the Three-Arch Rocks Reservation off the coast of Oregon.

We were making our slow way toward the top of the outer rock. Through rookery after rookery of birds we climbed until we reached the edge of the summit. Scrambling over this edge, we found ourselves in the midst of a great colony of nesting murres — hundreds of them — covering this steep rocky part of the top.

As our heads appeared above the rim, many of the colony took wing and whirred over us out to sea, but most of them sat close, each bird upon its egg or over its chick, loath to leave, and so expose to us the hidden treasure.

The top of the rock was somewhat cone-shaped, and in order to reach the peak and the colonies on the west side we had to make our way through this rookery of the murres. The first step among them,

and the whole colony was gone, with a rush of wings and feet that sent several of the top-shaped eggs rolling, and several of the young birds toppling over the cliff to the pounding waves and ledges far below.

We stopped, but the colony, almost to a bird, had bolted, leaving scores of eggs and scores of downy young squealing and running together for shelter, like so many beetles under a lifted board.

But the birds had not every one bolted, for here sat two of the colony among the broken rocks. These two had not been frightened off. That both of them were greatly alarmed, any one could see from their open beaks, their rolling eyes, their tense bodies on tiptoe for flight. Yet here they sat, their wings out like props, or more like gripping hands, as if they were trying to hold themselves down to the rocks against their wild desire to fly.

And so they were, in truth, for under their extended wings I saw little black feet moving. Those two mother murres were not going to forsake their babies! No, not even for these approaching monsters, such as they had never before seen, clambering over their rocks.

What was different about these two? They had their young ones to protect. Yes, but so had every bird in the great colony its young one, or its egg, to protect, yet all the others had gone. Did these two have more mother-love than the others? And hence, more courage, more intelligence?

We took another step toward them, and one of the two birds sprang into the air, knocking her baby over and over with the stroke of her wing, and coming within an inch of hurling it across the rim to be battered on the ledges below. The other bird raised her wings to follow, then clapped them back over her baby. Fear is the most contagious thing in the world; and that flap of fear by the other bird thrilled her, too, but as she had withstood the stampede of the colony, so she caught herself again and held on.

She was now alone on the bare top of the rock, with ten thousand circling birds screaming to her

in the air above, and with two men creeping up to her with a big black camera that clicked ominously. She let the multitude scream, and with threatening beak watched the two men come on. A motherless baby, spying her, ran down the rock squealing for

his life. She spread a wing, put her bill behind him, and shoved him quickly in out of sight with her own baby. The man with the camera saw the act, for I heard his machine click, and I heard him say something under his breath that you would hardly expect a mere man and a game-warden to say. But most men have a good deal of the mother in them; and the old bird had acted with such decision, such courage, such swift, compelling instinct, that any man, short of the wildest savage, would have felt his heart quicken at the sight.

"Just how compelling might that mother-instinct be?" I wondered. "Just how much would that mother-love stand?" I had dropped to my knees, and on all fours had crept up within about three feet of the bird. She still had chance for flight. Would she allow me to crawl any nearer? Slowly, very slowly, I stretched forward on my hands, like a measuring-worm, until my body lay flat on the rocks, and my fingers were within three *inches* of her. But her wings were twitching, a wild light danced in her eyes, and her head turned toward the sea.

For a whole minute I did not stir. I was watching — and the wings again began to tighten about the babies, the wild light in the eyes died down, the long, sharp beak turned once more toward me.

Then slowly, very slowly, I raised my hand, touched her feathers with the tip of one finger —

with two fingers — with my whole hand, while the loud camera click-clacked, click-clacked hardly four feet away!

It was a thrilling moment. I was not killing anything. I had no long-range rifle in my hands, coming up against the wind toward an unsuspecting creature hundreds of yards away. This was no wounded leopard charging me; no mother-bear defending with her giant might a captured cub. It was only a mother-bird, the size of a wild duck, with swift wings at her command, hiding under those wings her own and another's young, and her own boundless fear!

For the second time in my life I had taken captive with my bare hands a free wild bird. No, I had not taken her captive. She had made herself a captive; she had taken herself in the strong net of her mother-love.

And now her terror seemed quite gone. At the first touch of my hand I think she felt the love restraining it, and without fear or fret she let me reach under her and pull out the babies. But she reached after them with her bill to tuck them back out of sight, and when I did not let them go, she sidled toward me, quacking softly, a language that I perfectly understood, and was quick to respond to. I gave them back, fuzzy and black and white. She got them under her, stood up over them, pushed her wings down hard around them, her stout tail down

hard behind them, and together with them pushed in an abandoned egg that was close at hand. Her own baby, some one else's baby, and some one else's forsaken egg! She could cover no more; she had not feathers enough. But she had heart enough; and into her mother's heart she had already tucked every motherless egg and nestling of the thousands of frightened birds, screaming and wheeling in the air high over her head.

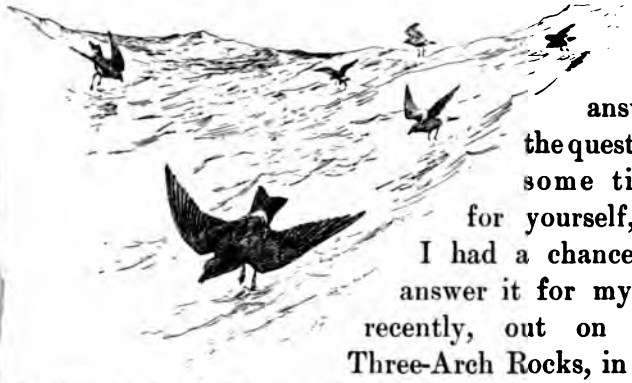
CHAPTER IX

MOTHER CAREY'S CHICKENS

WHO has not wondered," I asked, many years ago, "as he has seen the red rim of the sun sink down in the sea, where the little brood of Mother Carey's chickens skimming round the vessel would sleep that night?" Here on the waves, no doubt, but what a bed! You have seen them, or you will see them the first time you cross the ocean, far out of sight of land — a little band of small dark birds, veering, glancing, skimming the heaving sea like swallows, or riding the great waves up and down, from crest to trough, as easily as Bobolink rides the swaying clover billows in the meadow behind the barn.

I have stood at the prow and watched them as the huge steamer ploughed her way into the darkening ocean. Down in the depths beneath me the porpoises were playing, — as if the speeding ship, with its mighty engines, were only another porpoise playing tag with them, — and off on the gray sea ahead, where the circle of night seemed to be closing in, this little flock of stormy petrels, Mother Carey's chickens, rising, falling with the heave and sag of the sea, so far, for such little wings, from the shore!

You will see them, and you will ask yourself, as I asked myself, "Where is their home? Where do they nest?" I hope you will also have a chance to



answer the question some time for yourself, as I had a chance to answer it for myself recently, out on the Three-Arch Rocks, in the Pacific, just off the coast of Oregon.

I visited the rocks to see all their multitudinous wild life, — their gulls, cormorants, murres, guillemots, puffins, oyster-catchers, and herds of sea-lions, — but more than any other one thing I wanted to see the petrels, Kaeding's petrels, that nest on the top of Shag Rock, the outermost of the three rocks of the Reservation.

No, not merely to *see* the petrels: what I really wished to do was to stay all night on the storm-swept peak in order to hear the petrels come back to their nests on the rock in the dusk and dark. My friend Finley had done it, years before, on this very rock. On the steep north slope of the top he had found a safe spot between two jutting crags,

and, wrapping himself in his blanket as the sun went down behind the hill of the sea, had waited for the winnowing of the small mysterious wings.

Just to sleep in such a bed would be enough. To lie down far up on the ragged peak of this wild sea rock, with the break and swash of the waves coming up from far beneath you, with the wide sea-wind coming in, and the dusk spreading down, and the wild sea-birds murmuring in their strange tongues all about you — it would be enough just to turn one's face to the lonely sky in such a spot and listen. But how much more to hear suddenly, among all these strange sounds, the swift fanning of wings — to feel them close above your face — and to see in the dim dusk wavering shadowy forms, like a troop of long-winged bats, hovering over the slope and chittering in a rapid, unbirdlike talk, as if afraid the very dark might hear them!

That was what I wanted so much to hear and to see. For down in a little burrow, in the accumulated earth and guano of the top, under each of these hovering shadows, would be another shadow, waiting to hear the beating of the wings and the chitter above; and I wanted to see the mate in the burrow come out and greet the mate that had been all day upon the sea.

This petrel digs itself a little burrow and lays one egg. The burrow might hold both birds at once, but one seldom finds two birds in the burrow to-

gether. While one is brooding, the other is off on its wonderful wings — away off in the wake of your ocean steamer, perhaps, miles and miles from shore. But when darkness falls it remembers its nest and speeds home to the rock, taking its place down in the little black burrow, while the mate comes forth and spreads its wings out over the heaving water, not to return, it may be, until the night and the day have passed and twilight falls again.

We landed on a ledge of Shag Rock, driving off a big bull sea-lion who claimed this particular slab of rock as his own. We backed up close to the shelf in a yawl boat, and as the waves rose and fell, watched our chance to leap from the stern of the little boat to the rock. Thus we landed our cameras, food and water, and other things, then we dragged the boat up, so that, a storm arising or anything happening to the small steamer that had brought us, we might still get away to the shore.

It was about the middle of the forenoon. All the morning, as we had steamed along, a thick fog had threatened us; but now the sun broke out, making it possible to use our cameras, and after a hasty lunch we started for the top of the rock — a climb that looked impossible, and that was pretty nearly as impossible as it looked.

It had been a slow, perilous climb; but, once on the summit, where we could move somewhat freely and use the cameras, we hurried from colony to

colony to take advantage of the uncertain sunlight, which, indeed, utterly failed us after only an hour's work. But, as I had no camera, I made the best of it, giving all my time to studying the ways of the birds. Besides, I had come to stay on the peak all night; I could do my work well enough in the dark. But I could not do it in the wind and rain.

The sun went into the clouds about four o'clock, but so absorbed was I in watching, and so thick was the air with wings, so clangorous with harsh tongues, that I had not seen the fog moving in, or noticed that the gray wind of the morning had begun to growl about the crags. Looking off to seaward, I now saw that a heavy bank of mist had blurred the sky-line and settled down upon the sea. The wind had freshened; a fine, cold drizzle was beginning to fall, and soon came slanting across the peak. The prospect was grim and forbidding. Then the rain began. The night was going to be dark and stormy, too wet and wild for watching, here where I must hang on with my hands or else slip and go over — down — down to the waves below.

We started to descend at once, while there was still light enough to see by, and before the rocks were made any slipperier by the rain. We did not fear the wind much, for that was from the north, and we must descend by the south face, up which we had come.

I was deeply disappointed. My night with the

petrels on the top was out of the question. Yet as I backed over the rim of that peak, and began to pick my way down, it was not disappointment, but fear that I felt. It had been bad enough coming up; but this going down!—with the cold, wet shadow of night encircling you and lying dark on the cold, sullen sea below—this was altogether worse.

The rocks were already wet, and the footing was treacherous. As we worked slowly along, the birds in the gathering gloom seemed to fear us less, flying close about our heads, their harsh cries and winging tumult adding not a little to the peril of the descent. And then the looking down! and then the impossibility at places of even looking down—when one could only hang on with one's hands and feel around in the empty air with one's feet for something to stand on!

I got a third of the way down, perhaps, and then stopped. The men did not laugh at me. They simply looped a rope about me, under my arms, and lowered me over the narrow shelves into the midst of a large murre colony, from which point I got on alone. Then they tied the rope about Dallas, my eleven-year-old son, who was with me on the expedition, and lowered him.

He came bumping serenely down, smoothing all the little murres and feeling of all the warm eggs on the way, as if they might have been so many little

kittens, and as if he might have been at home on the kitchen floor, instead of dangling down the face of a cliff two hundred or more feet above the sea.

Some forty feet from the waves was a weathered niche, or shelf, eight or ten feet wide. Here we stopped for the night. The wind was from the other side of the rock; the overhanging ledge protected us somewhat from above, though the mist swept about the steep walls to us, and the drizzle dripped from overhead. But as I pulled my blanket about me and lay down beside the other men the thought of what the night must be on the summit made the hard, damp rock under me seem the softest and warmest of beds.

But what a place was this to sleep in!—this narrow ledge with a rookery of wild sea-birds just above it, with the den of a wild sea-beast just below it, with the storm-swept sky shut down upon it, and the sea, the crawling, sinister sea, coiling and uncoiling its laving folds about it, as with endless undulations it slipped over the sunken ledges and swam round and round the rock.

What a place was this to sleep! I could not sleep. I was as wakeful as the wild beasts that come forth at night to seek their prey. I must catch a glimpse of Night through her veil of mist, the gray, ghostly Night, as she came down the long, rolling slope of the sea, and I must listen, for my very fingers seemed to have ears, so many were the sounds, and

so strange — the talk of the wind on the rock, the sweep of the storm, the lap of the waves, the rumbling mutter of the wakeful caverns, the cry of birds, the hoarse grumbling growl of the sea-lions swimming close below.

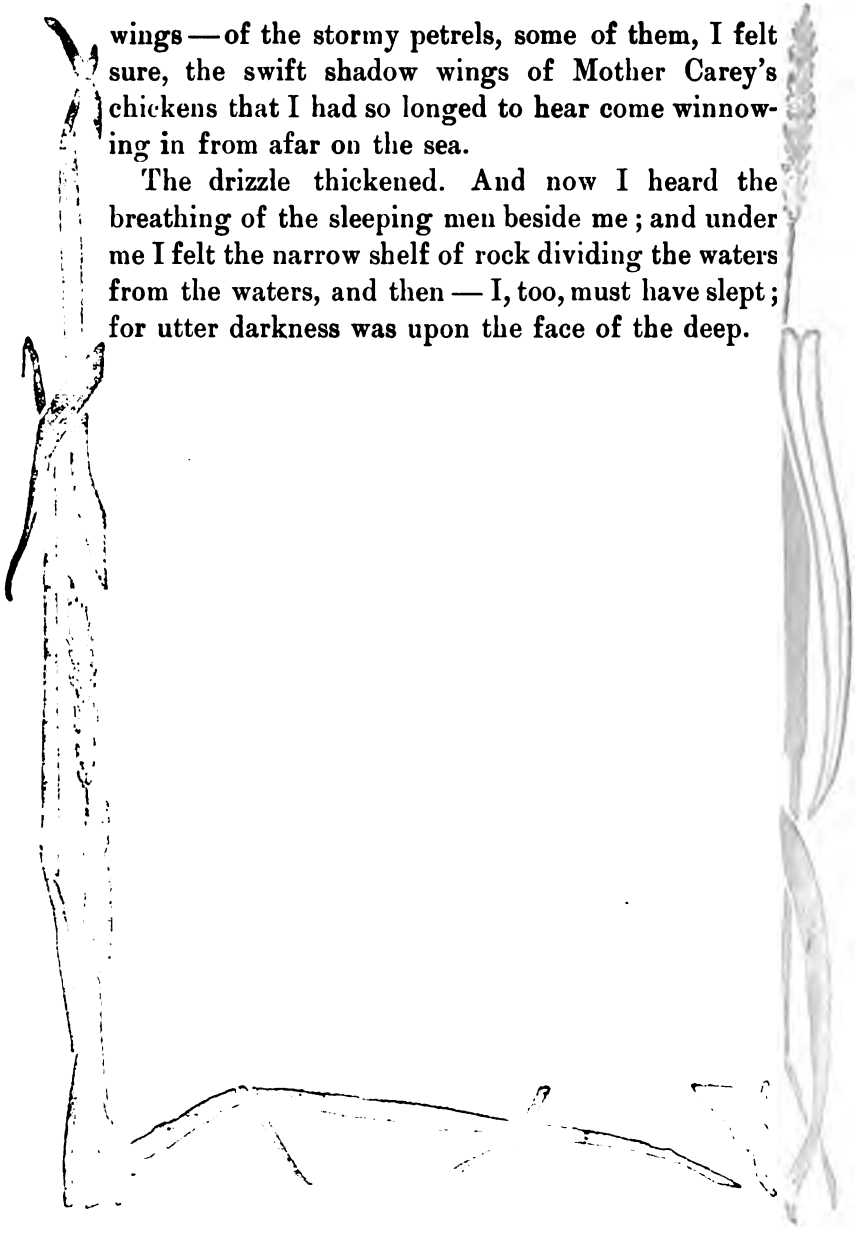
The clamor of the birds was at first disturbing. But soon the confusion caused by our descent among them subsided; the large colony of murres close by our heads returned to their rookery; and with the rain and thickening dark there spread everywhere the quiet of a low murmurous quacking. Sleep was settling over the rookeries.

Down in the sea below us rose the head of an old sea-lion, the old lone bull whose den we had invaded. He was coming back to sleep. He rose and sank, blinking dully at the cask we had left on his ledge; then clambered out and hitched slowly up toward his sleeping-place. I counted the scars on his head, and noted the fresh deep gash on his right side. I could hear him blow and breathe.

I drew back from the edge, and, pulling the piece of sail-cloth over me and the small boy at my side, turned my face up to the slanting rain. Two young gulls came out of their hiding in a cranny and nestled against my head, their parents calling gently to them from time to time all night long. In the murre colony overhead there was a constant stir and a soft, low talk, and over all the rock, through all the darkened air there was a silent coming and going of wings —

wings — of the stormy petrels, some of them, I felt sure, the swift shadow wings of Mother Carey's chickens that I had so longed to hear come winnowing in from afar on the sea.

The drizzle thickened. And now I heard the breathing of the sleeping men beside me; and under me I felt the narrow shelf of rock dividing the waters from the waters, and then — I, too, must have slept; for utter darkness was upon the face of the deep.



CHAPTER X

RIDING THE RIM ROCK

FROM P Ranch to Winnemucca is a seventeen-day drive through a desert of rim rock and greasewood and sage, which, under the most favorable of conditions, is beset with difficulty; but which, in the dry season, and with a herd of anything like four thousand, becomes an unbroken hazard. More than anything else on such a drive is feared the wild herd-spirit, the quick black temper of the cattle, that by one sign or another ever threatens to break the spell of the rider's power and sweep the maddened or terrorized herd to destruction. The handling of the herd to keep this spirit sleeping is ofttimes a thrilling experience.

Some time before my visit to P Ranch, in Harney County, southeastern Oregon, in the summer of 1912, the riders had taken out a herd of four thousand steers on what proved to be one of the most difficult drives ever made to Winnemucca, the shipping station in northern Nevada.

For the first two days on the trail the cattle were strange to each other, having been gathered from widely distant grazing-grounds, — from the Double O and the Home ranches, —and were somewhat clan-

nish and restive under the driving. At the beginning of the third day signs of real ugliness appeared. The hot weather and a shortage of water began to tell on the temper of the herd.

The third day was long and exceedingly hot. The line started forward at dawn and all day long kept moving, with the sun cooking the bitter smell of sage into the air, and with the sixteen thousand hoofs kicking up a still bitterer smother of alkali dust that inflamed eyes and nostrils and coated the very lungs of the cattle. The fierce desert thirst was upon the herd long before it reached the creek where it was to bed for the night. The heat and the dust had made slow work of the driving, and it was already late when they reached the creek — only to find it dry.

This was bad. The men were tired. But, worse, the cattle were thirsty, and Wade, the "boss of the buckaroos," pushed the herd on toward the next rim rock, hoping to get down to the plain below to water before the end of the slow desert twilight. Anything for the night but a dry camp.

They had hardly started on when a whole flank of the herd, as if by prearrangement, suddenly breaking away and dividing about two of the riders, tore off through the brush. The horses were as tired as the men, and before the chase was over the twilight was gray in the sage and it became necessary to halt at once and make camp where they were. They would have to go without water.

The runaways were brought up and the herd closed in till it formed a circle nearly a mile around. This was as close as it could be drawn, for the cattle would not bed — lie down. They wanted water more than they wanted rest. Their eyes were red, their tongues raspy with thirst. The situation was a serious one.

But camp was made. Two of the riders were sent back along the trail to bring up the "drags," while Wade with his other men circled the uneasy cattle, closing them in, quieting them, and doing everything possible to make them bed.

But they were thirsty, and, instead of bedding, the herd began to "growl" — a distant mutter of throats, low, rumbling, ominous, as when faint thunder rolls behind the hills. Every plainsman fears the growl, for it usually is a prelude to the "milling," as it proved to be now, when the whole vast herd began to stir, slowly, singly, and without direction, till at length it moved together, round and round, a great compact circle, the multitude of clicking hoofs, of clashing horns, and chafing sides like the sound of rushing rain across a field of corn.

Nothing could be worse for the cattle. The cooler twilight was falling, but, mingling with it, rose and thickened and spread the choking dust from their feet that soon covered them and shut out all but the dark wall of the herd from sight.

Slowly, evenly swung the wall, round and round without a break. Only one who has watched a mill-

ing herd can know its suppressed excitement. To keep that excitement in check was the problem of Wade and his men. And the night had not yet begun.

When the riders had brought in the drags and the chuck-wagon had lumbered up with supper, Wade set the first watch.

Along with the wagon had come the fresh horses — and Peroxide Jim, a supple, powerful, clean-limbed buckskin, that had, I think, as fine and intelligent an animal-face as any I ever saw. And why should he not have been saved fresh for just such a need as this? Are there not superior horses to match superior men — a Peroxide Jim to complement a Wade and so combine a real centaur, noble physical power controlled by noble intelligence? At any rate, the horse understood the situation, and though there was nothing like sentiment about the boss of the P Ranch riders, his faith in Peroxide Jim was complete.

The other night horses were saddled and tied to the wheels of the wagon. It was Wade's custom to take his turn with the second watch; but, shifting his saddle to Peroxide Jim, he rode out with the four of the first watch, who, evenly spaced, were quietly circling the herd.

The night, for this part of the desert, was unusually warm; it was close, silent, and without a sky. The near thick darkness blotted out the stars. There is usually a breeze at night over these highest rim-

rock plains that, no matter how hot the day, crowds the cattle together for warmth. To-night not a breath stirred the sage as Wade wound in and out among the bushes, the hot dust stinging his eyes and caking rough on his skin.

Round and round moved the weaving, shifting forms, out of the dark and into the dark, a gray spectral line like a procession of ghosts, or some slow morris of the desert's sheeted dead. But it was not a line, it was a sea of forms; not a procession, but the even surging of a maelstrom of hoofs a mile around.

Wade galloped out on the plain for a breath of air and a look at the sky. A quick cold rain would quiet them; but there was no feel of rain in the darkness, no smell of it in the air. Only the powdery taste of bitter sage.

The desert, where the herd had camped, was one of the highest of a series of tablelands, or benches, that lay as level as a floor, and rimmed by a sheer wall of rock over which it dropped to the bench of sage below. The herd had been headed for a pass, and was now halted within a mile of the rim rock on the east, where there was about three hundred feet of perpendicular fall.

It was the last place an experienced plainsman would have chosen for a camp; and every time Wade circled the herd and came in between the cattle and the rim, he felt its nearness. The darkness helped to

bring it near. The height of his horse brought it near — he seemed to look down from his saddle over it, into its dark depths. The herd in its milling was surely warping slowly in the direction of the precipice. But this was all fancy — the trick of the dark and of nerves, if a plainsman has nerves.

At twelve o'clock the first guard came in and woke the second watch. Wade had been in his saddle since dawn, but this was his regular watch. More than that, his trained ear had timed the milling hoofs. The movement of the herd had quickened.

If now he could keep them going and could prevent their taking any sudden fright! They must not stop until they stopped from utter weariness. Safety lay in their continued motion. So Wade, with the fresh riders, flanked them closely, paced them, and urged them quietly on. They must be kept milling, and they must be kept from fright.

In the taut silence of the starless desert night, with the tension of the cattle at the snapping-point, any quick, unwonted sight or sound would stampede the herd — the sneezing of a horse, the flare of a match, enough to send the whole four thousand headlong — blind, frenzied, tramping — till spent and scattered over the plain.

And so, as he rode, Wade began to sing. The rider ahead of him took up the air and passed it on, until, above the stepping stir of the hoofs, rose the

faint voices of the men, and all the herd was bound about by the slow, plaintive measure of some old song. It was not to soothe their savage breasts that the riders sang to the cattle, but to prevent the shock of any loud or sudden noise.

So they sang and rode, and the night wore on to one o'clock, when Wade, coming up on the rim-rock side, felt a cool breeze fan his face, and caught a breath of fresh, moist wind with the taste of water in it.

He checked his horse instantly, listening as the wind swept past him over the cattle. But they must already have smelled it, for they had ceased their milling. The whole herd stood motionless, the indistinct forms nearest him showing, in the dark, their bald faces lifted to drink the sweet wet breath that came over the rim. Then they started again, but faster, and with a rumbling from their hoarse throats that tightened Wade's grip on his reins.

The sound seemed to come out of the earth, a low, rumbling mumble, as deep as the night and as wide as the plain, a thick, inarticulate bellow that stood every rider stiff in his stirrups.

The breeze caught the dust and carried it back from the gray-coated, ghostly shapes, and Wade saw that they were still moving in a circle. If only he could keep them going! He touched his horse to ride on with them, when across the black sky flashed a vivid streak of lightning.

There was a snort from the steers, a quick clap of horns and hoofs from within the herd, a tremor of the plain, a roar, a surging mass — and Wade was riding the flank of a wild stampede. Before him, behind him, beside him, pressing hard upon his horse, galloped the frenzied steers, and beyond them a multitude, borne on, and bearing him on, by the heave of the galloping herd.

Wade was riding for his life. He knew it. His horse knew it. He was riding to turn the herd, too, — back from the rim, — as the horse also knew. The cattle were after water — water-mad — and would go over the precipice to get it, carrying horse and rider with them.

Wade was the only rider between the herd and the rim. It was black as death. He could see nothing in the sage, could scarcely discern the pounding, panting shadows at his side; but he knew by the swish of the brush and the plunging of the horse that the ground was growing stonier, that they were nearing the rocks.

To outrun the cattle seemed his only chance. If he could come up with the leaders he might yet head them off upon the plain and save the herd. There were cattle still ahead of him, — how many, what part of the herd, he could not tell. But the horse knew. The reins hung on his straight neck, while Wade, yelling and firing into the air, gave him the race to win, to lose.

Suddenly they veered and went high in the air, as a steer plunged headlong into a draw almost beneath his feet. They cleared the narrow ravine, landed on bare rock, and reeled on.

They were riding the rim. Close on their left bore down the flank of the herd, and on their right, under their very feet, was the precipice, so close that they felt its blackness — its three hundred feet of fall.

A piercing, half-human bawl of terror told where a steer had been crowded over. Would the next leap crowd them over too? Then Wade found himself racing neck and neck with a big white steer, which the horse, with marvelous instinct, seemed to pick from a bunch, and to cling to, forcing him gradually ahead, till, cutting him free from the bunch entirely, he bore him off into the sage.

The group coming on behind followed the leader, and after them swung others. The tide was turning. Within a short time the whole herd had veered, and, bearing off from the cliffs, was pounding over the open plains.

Whose race was it? It was Peroxide Jim's, according to Wade, for not by word or by touch of hand or knee had he been directed in the run. From the flash of the lightning the horse had taken the bit, had covered an indescribably perilous path at top speed, had outrun the herd and turned it from the edge of the rim rock, without a false step or a shaken nerve.

(Page 7)

"NECK AND NECK WITH A BIG WHITE STEER"

Bred on the desert, broken in at the round-up, trained to think steer as the rider thinks it, the horse knew, as swiftly, as clearly as his rider, the work before him. But that he kept himself from fright, that none of the wild herd-madness passed into him, is a thing for great wonder. He was as thirsty as any of the herd; he knew his own peril, I believe, as none of the herd had ever known anything, and yet such coolness, courage, wisdom, and power!

Was it training? Superior intelligence? More intimate association with the man on his back, and so a farther remove from the wild thing that domestication does not seem to touch? Or was it all by suggestion, the superior intelligence above him riding, not only the flesh, but the spirit?

Not all suggestion, I believe. Perhaps a herd of horses could not be stampeded so easily as these P Ranch cattle. In this race, however, nothing of the wild herd-spirit touched the horse. Had the cattle been horses, would Peroxide Jim have been able to keep himself outside the stampede and above the spirit of the herd?

CHAPTER XI

A CHAPTER OF THINGS TO DO THIS SUMMER

I

FIRST, select some bird or beast or insect that lives with you in your dooryard or house or near neighborhood, and keep track of his doings all summer long, jotting down in a diary your observations. You might take the white-faced hornet that builds the big paper nests in the trees; or the mud wasp, or the toad under the steps, or the swifts in the chimney, or the swallows in the barn. It hardly matters what you take, for every life is interesting. The object is to learn how to follow up your study, how to watch one life long enough, and under circumstances different enough, to discover its many-sidedness, its fascination and romance. Such careful and prolonged study will surely reveal to you something no one else has seen, too. It will be good training in patience and independence.

II

Along with this study of *one* life, keep a list of all the beasts, birds, insects, flowers, etc., that live — I mean, that build nests or dig holes and rear families — in your dooryard or in this "haunt" that I

told you in "The Spring of the Year" (see page 42, Sections III and IV) you ought to pick out as your own field of study. This list will grow all through the summer and from year to year. I have a list of seventy-six wild neighbors (not counting the butterflies and insects) that are sharing my fourteen-acre farm with me. How many and *what* wild things are sharing your dooryard, your park, your favorite haunt or farm with you? Such a list of names, with a blank place left for each where observations can be entered from time to time, would be one of the most useful and interesting journals you could keep.

III

All through June and into July you should have a round of birds' nests that you visit daily, and to which you can take your friends and visitors — that is, if you live in or near the country. One will be in the big unused chimney of the house, perhaps, and that will be the first; then one in the barn, or in a bird-house in the yard; or in the pear- or apple-tree hole; one in the lilac or honeysuckle bushes, and then down into the orchard, out into the meadow, on into the woods and back — taking in twenty to thirty birds' nests with eggs and young! Did you ever do it? Can you do it this summer? Don't you think it would be quite as exciting and interesting as going to the circus? I can do it; and if you come out to Mullein Hill in June or July, any one

of my small boys will take you on his "birds' nest round."

IV

You should camp out — even if you have to pitch your tent in the back yard or up on the roof! You should go to sleep on a bed of boughs, — pine, or spruce, or hickory, if possible, — or swing your hammock between the trunks of sweet-smelling forest trees, and turn your face up to the stars! You will never want to sleep in a room with closed windows after that. To see the stars looking down upon you; to see the tree-tops swaying over you; to feel the fresh night wind stealing across your face and breathing into your very soul — yes, you must sleep at least *one* night this summer right out on a bed of boughs; but with a blanket of wool and a piece of sail-cloth or rubber coat over you and under you, and perhaps some mosquito-netting.

V

But you must *not* build a fire in the woods, unless you have a guide or older people with a permit along. Fires are terrible masters, and it is almost as dangerous to build a fire in the woods as to build one in the waste-paper basket in the basement of some large store. Along the seashore or by the margin of a river or lake, if you take every precaution, it might be safe enough; but in the woods, if camping out, make all preparations by clearing a wide

space down to the bare ground, then see that it is bare ground and not a boggy, rooty peat-bed beneath, that will take fire and smoulder and burn away down under the surface out of sight, to break through, perhaps, a week after you have gone, and set the whole mountain-side afire. Build your fire on bare, sandy earth; have a shovel and can of water at hand, and put the fire out when you are done with it. It is against the law in most States to set a fire out of doors after the 1st of April, without a permit from the fire-warden.

Now, after this caution, you ought to go out some evening by the shore with a small party and roast some green corn in the husk; then, wrapping some potatoes in clay, bake them; if you have fish, wrap them in clay with their scales on, and bake them. The scales will come off beautifully when the clay is cracked off, and leave you the tastiest meal of fish and potatoes and corn you ever ate. Every boy and girl ought to have a little camp-life and ought to have each his share of camp-work to perform this summer.

VI

At the close of some stifling July day you ought to go out into the orchard or woods and watch the evening come on — to notice how the wild life revives, flowers open, birds sing, animals stir, breezes start, leaves whisper, and all the world awakes.

Then follow that up by getting out the next morning before sunrise, say at half-past three o'clock, an hour before the sun bursts over the eastern hills. If you are not a stump or a stone, the sight and the smell—the whole indescribable freshness and wonder of it all—will thrill you. Would you go to the Pyramids or Niagara or the Yellowstone Park? Yes, you would, and you would take a great deal of trouble to see any one of these wonders! Just as great a wonder, just as thrilling an experience, is right outside of your bedroom early any June, July, or August morning! I know boys and girls who *never* saw the sun get up!

VII

You ought to spend some time this summer on a real farm. Boy or girl, you need to feel ploughed ground under your feet; you need the contact with growing things in the ground; you need to handle a hoe, gather the garden vegetables, feed the chickens, feed the pigs, drive the cows to pasture, help stow away the hay—and all the other interesting experiences that make up the simple, elemental, and wonderfully varied day of farm life. A mere visit is not enough. You need to take part in the digging and weeding and planting. The other day I let out my cow after keeping her all winter in the barn. The first thing she did was to kick up her heels and run to a pile of fresh earth about a newly planted

tree and fall to eating it — not the tree, but the earth, the raw, rich soil — until her muzzle was muddy halfway to her eyes. You do not need to eat it; but the need to smell it, to see it, to feel it, to work in it, is just as real as the cow's need to eat it.

VIII

You ought to learn how to browse and nibble in the woods. What do I mean? Why, just this: that you ought to learn how to taste the woods as well as to see them. Maurice Thompson, in "Byways and Bird Notes," a book you ought to read (and that is another "ought to do" for this summer), has a chapter called "Browsing and Nibbling" in which his mountain guide says: "What makes me allus a-nibblin' an' a-browsin' of the bushes an' things as I goes along? I kinder b'lieve hit keeps a feller's heart stiddy an' his blood pure for to nibble an' browse kinder like a deer does. You know a deer is allus strong an' active, an' hit is everlastin'ly a-nibblin' an' a-browsin'. Ef hit is good for the annymel, hit otter be good for the feller."

SASSAFRAS

The guide may not be right about the strength to be had from tasting the roots and barks and buds of things, but I know that I am right when I tell you that the very sap of the summer woods will seem to mingle with your blood at the taste of the aromatic sassafras root, the spicy bark of the sweet birch and

DEADLY NIGHTSHADE

the biting bulb of the Indian turnip. Many of the perfumes, odors, resins, gums, saps, and nectars of the woods can be known to you only by sense of taste.

IX

"But I shall bite into something poisonous," you say. Yes, you must look out for that, and you must

POISON SUMACH

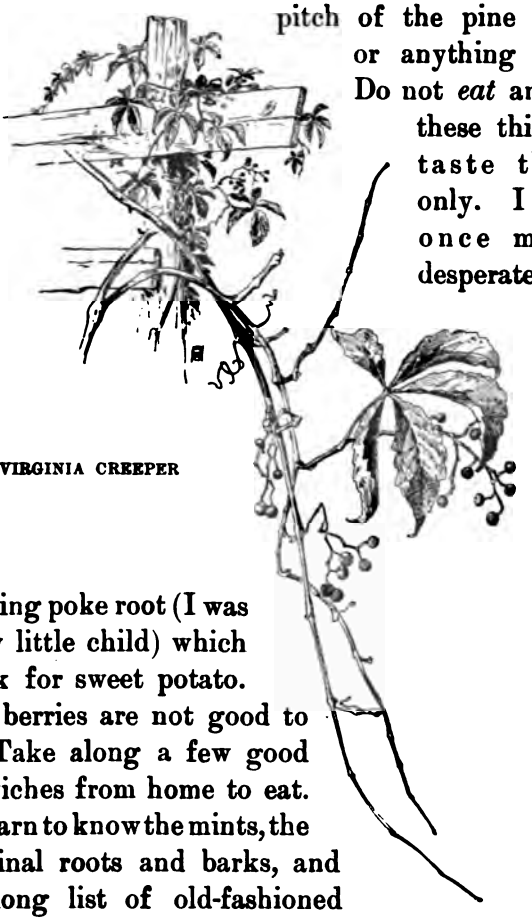
take the pains this summer to learn the poisonous things of our woods and fields. So before you begin to browse and nibble, make a business of learning the

deadly nightshade with its green or its red berries; the poison sumach with its *loose* panicles or clusters

POISON IVY

of grayish-white berries; the three-leaved poison ivy or "ground oak" (which you can easily tell from the five-leaved Virginia creeper); and the deadly mushrooms with their *bulbous* roots. These are the poisonous plants that you will meet with most frequently, but there are a few others, and it will be

safest not to nibble any plant that is strange to you. Nor am I suggesting that you make a meal on the pitch of the pine trees or anything else. Do not *eat* any of these things; taste them only. I was once made desperately ill by eating poke root (I was a very little child) which I took for sweet potato. Poke berries are not good to *eat*. Take along a few good sandwiches from home to eat. But learn to know the mints, the medicinal roots and barks, and that long list of old-fashioned "herbs" that our grandmothers hung from the garret rafters and made us take occasionally as "tea."



VIRGINIA CREEPER

X

Finally, as a lover of the woods and wild life, you ought to take a personal responsibility for the preservation of the trees and woods in your neighborhood, and of the birds and beasts and other lowlier forms of wild life. Year by year the wild things are vanishing never to return to your woods, and never to be seen again by man. Do what you can to stop the hunting and ignorant killing of every sort. You ought to get and read "Our Vanishing Wild Life," by William T. Hornaday, and then join the growing host of us

THE DEADLY AMANITA

who, alarmed at the fearful increase of insect pests, and the loss to the beauty and interest of the out-

POKE

of-doors through the extermination of wild life, are doing our best to save the wild things we still have and to increase their numbers.

CHAPTER XII

THE "CONY"

WE were threading our slow way along the narrow divide of the Wallowa Mountains that runs between the branches of the Snake River. Our guide was a former "camp-tender," one who carries provisions to the sheep-herders in the mountains. As we were stopping a moment to breathe our horses and to look down upon the head springs of Big Sheep and Salt Lick Creeks on one side, and the narrow ribbon of the Imnaha on the other, this guide and our mammal-collector rode on ahead. An hour later I saw them round the breast of a peak far along on the trail and disappear. That night they brought into camp a "cony," or pika, or little chief hare.

The year before, this camp-tender, in passing a certain rock-slide among the high peaks of the pass, had heard and seen a peculiar little animal about the size and shape of a small guinea-pig, whistling among the broken rock. He had never seen the little creature before, — had never heard of it. It was to this slide that he now took our naturalist, in the hope of showing him the mountain guinea-pig, and, sure enough, they brought one back with them, and showed me

my first "cony," one of the rarest of American mammals.

But I was broken-hearted. That I should have been so near and missed it! For we had descended to Aneroid Lake to camp that night, and there were no cony slides below us on the trail.

While the men were busy about camp the next morning, I slipped off alone on foot, and, following the trail, got back about ten o'clock to the rock-slide where they had killed the cony.

A wilder, barrener, more desolate land of crags and peaks I never beheld. Eternal silence seemed to wrap it round. The slide was of broken pieces of rock, just as if the bricks from an immense chimney had cracked off and rolled down into the valley of the roof. Stunted vegetation grew around, with scraggly wild grass and a few snow-line flowers, for this was on the snow-line, several melting banks glistening in the morning sun about me.

I crept round the sharp slope of the peak and down to the edge of the rock-slide. "Any living thing in that long heap of broken rock!" I said to myself incredulously. That barren, blasted pile of splintered peaks the home of an animal? Why, I was on the top of the world! A great dark hawk was wheeling over toward Eagle Cap Mountain in the distance; far below me flapped a band of ravens; and down, down, immeasurably far down, glistened the small winding waters of the Imnaha; while all about me

were the peaks, lonely, solitary, mighty, terrible! Such bleakness and desolation!

But here, they told me, they had shot the cony. I could not believe it. Why should any animal live away up here on the roof of the world? For several feet each side of the steep, piled-up rock grew spears of thin, wiry grass about six inches high, and a few stunted flowers, — pussy's-paws, alpine phlox, and beardtongue, all of them flat to the sand, — and farther down the sides of the ravine were low, twisted pines, — mere prostrate mats of trees that had crept in narrow ascending tongues, up and up, until they could hang on no longer to the bare alpine slopes. But here above the stunted pines, here in the slide rock, where only mosses and a few flat plants could live, — plants that blossom in the snow, — dwell the conies.

I sat down on the edge of the slide, feeling that I had had my labor for my pains. We had been climbing these peaks in the hope of seeing one of the last small bands of mountain sheep that made these fastnesses their home. But, much as I wished to see a wild mountain sheep among the crags, I wished more to see the little cony among the rocks. "As for the stork," says the Bible, "the fir trees are her house. The high hills are a refuge for the wild goats; and the rocks for the conies." I had always wondered about those conies — what they looked like and how they lived among the rocks.

I knew that these little conies here in the slide (if indeed they *could* be here) were not those of the mountain-peaks of Palestine. What of that! The very rocks might be different in kind from the rocks of Nebo or Lebanon; but peaks are peaks, and rocks are rocks, and the strange little "rabbits" that dwell in their broken slides are all conies to me. The cony of the Bible is the little hyrax, a relative of the elephant.

I sat for a while watching. Was this the place? I must make sure before I settled down to waiting, for when in all my life again might I have this chance?

Out in the middle of the slide was a pile of rocks with an uneven look about them, as if they had been heaped up there by other hands than those that hurled them from the peak. Going quietly out, I examined them closely, and found the perfect print of a little bloody paw on one of them.

This was the right place. Here was where they had shot the specimen brought into camp. I got back to my seat, ready now to wait, even while I knew that I was holding back the camp from its day's march.

Perhaps I had been watching for half an hour, when from somewhere, in the rock-slide surely, though I could not tell, there sounded a shrill bleating whistle, not unlike the whistles of the ground squirrels and marmots that I had heard all

through the mountains, yet more tremulous and not so piercing.

I waited. Presently a little gray form crept over a stone, stopped and whistled, then disappeared. It was my cony!

If you can think of Molly Cottontail turned into the shape of a guinea-pig about eight inches long,

with positively no tail at all, and with big round broad ears, and with all four legs of equal length so that the creature walks instead of hopping, — if you can imagine such a rabbit, — you will get a pretty clear picture of the cony, or pika, or "little chief hare."

I kept as still as the stones. Presently the plaintive, bleating whistle sounded from nowhere again — behind me, beyond me, up the slide or down, I

could not tell. The rocks were rough, rusty chunks two or three feet long, piled helter-skelter without form or order, so that any one spot in the slide looked precisely like every other spot. I could not tell just the piece the cony had crossed, once my eyes were off of it, nor into which of the cracks he had disappeared. I could only sit still and wait till I caught him moving, so completely did his color blend with the rusty brown tone of the slide.

All the while the shrill, piteous call kept coming from anywhere in the slide. But it was not the call of several voices, not a colony whistling at once. The conies live in colonies, but, judging from the single small haycock which they had curing in the sun, I think there could not have been more than two or three pairs of them in this particular slide. Possibly there was only the single pair, one of which had been shot, for presently, when my eyes grew sharp enough to pick the little creature out against the rocks, I found that one was doing all the calling, and that for some reason he was greatly disturbed.

Now he would stop on a slab and whistle, then dive into some long passage under the stones, to reappear several feet or yards away. Here he would pause to listen, and, hearing nothing, would call again, waiting for an answer to his tremulous cry which did not come.

Under and over the stones, up and down the slide, now close to me, now on the extreme opposite edge

of the pile he traveled, nervously, anxiously looking for something — for some *one*, I truly think; and my heart smote me when I thought it might be for the dead mate whose little bare foot-pads had left the bloody print upon the rock.

Up and down, in and out, he ran, calling, calling, calling, but getting no answer back. He was the only one that showed himself, the only live one I have ever seen, but this one I followed, as he went searching and crying over the steep rock-slide, with my eye and with the field-glasses, until long past noon — with a whole camp down the cañon looking for me!

But they must know where to look. Let them climb out of the cañon, back to the top of the world to the cony slide, if they could not wait for me.

Higher up than the mountain sheep or the goat can live, where only the burrowing pocket gopher and rare field mice are ever found, dwells the cony. This particular slide was on one of the minor peaks, — loftier ones towered all about, — nor do I know just how high it was, but the cony dwells above the tree-line, up in the Arctic-Alpine Zone, in a world of perpetual snow, from ten to fourteen thousand feet above the sea.

By perpetual snow I mean that the snow-banks never melt in the shadowed ravines and on the bare north slopes. Here, where I was watching, the rock-slide lay open to the sun, the scanty grass was green beyond the gully, and the squat alpine flowers were

in bloom, the saxifrage and a solitary aster (April and September together!) blossoming in the edges of the snow just as fast as the melting banks allowed them to lift their heads. But any day the wind might come down from the north, keen and thick and white about the summits, and leave the flowers and the cony slide covered deep beneath a drift.

Spring, summer, and autumn are all one season, all crowded together — a kind of peak piercing for a few short weeks the long, bleak, unbroken land of winter here on the roof of the world.

But during this brief period the thin grass springs up, and the conies cut and cure it, enough of it to last them from the falling of the September snows until the drifts are once more melted and their rock-slide warms in another summer's sun.

For the cony does not hibernate. He stays awake down in his catacombs. Think of being buried alive in pitch-black night with snow twenty-five feet thick above you for nine out of twelve months of the year! Yet here they are away up on the sides of the wildest summits, living their lives, keeping their houses, rearing their children, visiting back and forth through their subways for all this long winter, protected by the drifts which lie so deep that they keep out the cold.

As I looked about me I could not see grass enough to feed a pair of conies for a winter. Right near me was one of their little haycocks, nearly cured and

ready for storing in their barns beneath the rocks; but this would not last long. It was already early August and what haying they had to do must be done quickly or winter would catch them hungry.

They cut the grass that grows in the vicinity of the slide, and cock it until it is cured, then they carry it all below against the coming of the cold; and naturalists who have observed them describe with what hurry and excitement the colony falls to taking in the hay when bad weather threatens to spoil it.

Hardy little farmers! Bold small folk! Why climb for a home with your tiny, bare-soled feet above the aerie of the eagle and the cave of the soaring condor of the Sierras? Why not descend to the warm valleys, where winter, indeed, comes, but cannot linger?—or farther down where the grass is always green, with never a need to cut and cure a winter's hay?

I do not know why — nor why upon the tossing waves the little petrel makes her bed; nor why, beneath the waves, "down to the dark, to the utter dark" on

"The great gray level plains of ooze,"

the "blind white sea-snakes" make their home; nor why at the north, in the fearful, far-off, frozen north, the little lemmings dwell; nor why, nor why. But as I sat there above the clouds, listening to the plaintive, trembling whistle of the little cony, and

hoping his mate was not dead, and wondering why he stayed here in the barren peak, and how he must fare in the black, bitter winter, I said over to myself the lines of Kipling for an answer, —

> "And God who clears the grounding berg
> And steers the grinding floe,
> He hears the cry of the little kit-fox
> And the lemming on the snow."

AUTUMN

THE WILD GEESE ARE PASSING — SOUTHWARD

THE FALL OF THE YEAR

CHAPTER I

THE CLOCK STRIKES ONE

"The clock strikes one,
And all is still around the house!
But in the gloom
A little mouse
Goes creepy-creep from room to room."

THE clock of the year strikes one! — not in the dark silent night of winter, but in the hot light of midsummer.

It is a burning July day, — one o'clock in the afternoon of the year, — and all is still around the fields and woods. All is still. All is hushed. But yet, as I listen, I hear things in the dried grass, and in the leaves overhead, going "creepy-creep," as you have heard the little mouse in the silent night.

I am lying on a bed of grass in the shade of a great oak tree, as the clock of the year strikes one. I am all alone in the quiet of the hot, hushed day. Alone? Are you alone in the big upstairs at midnight, when you hear the little mouse going "creepy-

creep" from room to room? No; and I am not alone.

High overhead the clouds are drifting past; and between them, far away, is the blue of the sky — and how blue, how cool, how far, far away! But how near and warm seems the earth!

I lie outstretched upon it, feeling the burnt crisp grass beneath me, a beetle creeping under my shoulder, the heat of a big stone against my side. I throw out my hands, push my fingers into the hot soil, and try to take hold of the big earth as if I were a child clinging to my mother.

And so I am. But I am not frightened, as I used to be, when the little mouse went "creepy-creep," and my real mother brought a candle to scare the mouse away. It is because I am growing old? But I cannot grow old to my mother. And the earth is my mother, my second mother. The beetle moving under my shoulder is one of my brothers; the hot stone by my side is another of my brothers; the big oak tree over me is another of my brothers; and so are the clouds, the white clouds drifting, drifting, drifting, so far away yonder, through the blue, blue sky.

The clock of the year strikes one. The summer sun is overhead. The flood-tide of summer life has come. It is the noon hour of the year.

The drowsy silence of the full, hot noon lies deep across the field. Stream and cattle and pasture-slope

are quiet in repose. The eyes of the earth are heavy. The air is asleep. Yet the round shadow of my oak begins to shift. The cattle do not move; the pasture still sleeps under the wide, white glare.

But already the noon is passing — to-day I see the signs of coming autumn everywhere.

Of the four seasons of the year summer is the shortest, and the one we are least acquainted with. Summer is hardly a pause between spring and autumn, simply the hour of the year's noon.

We can be glad with the spring, sad with the autumn, eager with the winter; but it is hard for us to go softly, to pause and to be still with the summer; to rest on our wings a little like the broad-winged hawk yonder, far up in the wide sky.

But now the hawk is not still. The shadow of my oak begins to lengthen. The hour is gone; and, wavering softly down the languid air, falls a yellow leaf from a slender birch near by. I remember, too, that on my way through the woodlot I frightened a small flock of robins from a pine; and more than a week ago the swallows were gathering upon the telegraph wires. So quickly summer passes. It was springtime but yesterday, it seems; to-day the autumn is here.

It is a July day. At dawn the birds were singing, fresh and full-throated almost as in spring. Then the sun burned through the mist, and the chorus ceased. Now I do not hear even the chewink and the

talkative vireo. Only the fiery notes of the scarlet tanager come to me through the dry white heat of the noon, and the resonant song of the indigo bunting — a hot, metallic, quivering song, as out of a "hot and copper sky."

There are nestlings still in the woods. This indigo bunting has eggs or young in the bushes of the hillside; the scarlet tanager by some accident has but lately finished his nest in the tall oaks. I looked in upon some half-fledged cuckoos along the fence. But all of these are late. Most of the year's young are upon the wing.

A few of the spring's flowers are still opening. I noticed the bees upon some tardy raspberry blossoms; here and there is a stray dandelion. But these are late. The season's fruit has already set, is already ripening. Spring is gone; the sun is overhead; the red wood-lily is open. To-day is the noon of the year.

High noon! and the red wood-lily is aflame in the old fields, and in the low tangles of sweet-fern and blackberry that border the upland woods.

The wood-lily is the flower of fire. How impossible it would be to kindle a wood-lily on the cold, damp soil of April! It can be lighted only on this kiln-dried soil of July. This old hilly pasture is baking in the sun; the low mouldy moss that creeps over its thin breast crackles and crumbles under my feet; the patches of sweet-fern that blotch it here and there crisp in the heat and fill the smothered air

with their spicy breath; while the wood-lily opens wide and full, lifting its spotted lips to the sun for his scorching kiss. See it glow! Should the withered thicket burst suddenly into a blaze, it would be no wonder, so hot and fiery seem the petals of this flower of the sun.

How unlike the tender, delicate fragrant flowers of spring are these strong flowers of the coming fall! They make a high bank along the stream — milkweed, boneset, peppermint, turtle-head, joe-pye-weed, jewel-weed, smartweed, and budding goldenrod! Life has grown lusty and lazy and rank.

But life has to grow lusty and rank, for the winter is coming; and as the woodchucks are eating and eating, enough to last them until spring comes again, so the plants are storing fat in their tap-roots, and ripening millions of seeds, to carry them safely through the long dead months of winter.

The autumn is the great planting time out of doors. Every autumn wind is a sower going forth to sow. And he must have seeds and to spare — seeds for the waysides for the winter birds to eat, seeds for the stony places where there is no depth of soil for them, seeds for the ploughed fields where they are not allowed to grow, seeds for every nook and corner, in order that somewhere each plant may find a place to live, and so continue its kind from year to year.

Look at the seeds of the boneset, joe-pye-weed, milkweed, and goldenrod! Seeds with wings and

plumes and parachutes that go floating and flying and ballooning.

"Over the fields where the daisies grow,
Over the flushing clover,
A host of the tiniest fairies go —
Dancing, balancing to and fro,
Rolling and tumbling over.

"Quivering, balancing, drifting by,
Floating in sun and shadow —
Maybe the souls of the flowers that die
Wander, like this, to the summer sky
Over a happy meadow."

So they do. They wander away to the sky, but they come down again to the meadow to make it happy next summer with new flowers; for these are the seed-souls of thistles and daisies and fall dandelions seeking new bodies for themselves in the warm soil of Mother Earth.

Mother Earth! How tender and warm and abundant she is! As I lie here under the oak, a child in her arms, I see the thistle-down go floating by, and on the same laggard breeze comes up from the maple swamp the odor of the sweet pepper-bush. A little flock of chickadees stop in the white birches and quiz me. "Who are you?" "Who are you-you-you?" they ask, dropping down closer and closer to get a peek into my face.

Perhaps they don't know who I am. Perhaps I don't know who they are. They are not fish hawks, of course; but neither am I an alligator or a pump-

kin, as the chickadees surely know. This much I am quite sure of, however: that this little flock is a family — a family of young chickadees and their two parents, it may be, who are out seeing the world together, and who will stay together far into the cold coming winter.

They are one of the first signs of the autumn to me, and one of my surest, sweetest comforts as the bleak cold winds come down from the north. For the winds will not drive my chickadees away, no matter how cold and how hard they blow, no matter how dark and how dead the winter woods when, in the night of the year, the clock strikes twelve.

The clock to-day strikes one, and all is still with drowsy sleep out of doors. The big yellow butterflies, like falling leaves, are flitting through the woods; the thistledown is floating, floating past; and in the sleepy air I see the shimmering of the spiders' silky balloons, as the tiny aeronauts sail over on their strange voyages through the sky.

How easy to climb into one of their baskets, and in the fairy craft drift far, far away! How pleasant, too, if only the noon of the year would last and last; if only the warm sun would shine and shine; if only the soft sleepy winds would sleep and sleep; if only we had nothing to do but drift and drift and drift!

But we have a great deal to do, and we can't get any of it done by drifting. Nor can we get it done by lying, outstretched upon the warm

earth this July day. Already the sun has passed overhead; already the cattle are up and grazing; already the round shadow of the oak tree begins to lie long across the slope. The noon hour is spent. I hear the quivering click-clack of a mowing-machine in a distant hay field. The work of the day goes on. My hour of rest is almost over, my summer vacation is nearly done. Work begins again to-morrow.

But I am ready for it. I have rested outstretched upon the warm earth. I have breathed the sweet air of the woods. I have felt the warm life-giving sun upon my face. I have been a child of the earth. I have been a brother to the stone and the bird and the beetle. And now I am strong to do my work, no matter what it is.

CHAPTER II

ALONG THE HIGHWAY OF THE FOX

WITH only half a chance our smaller wild animals — the fox, the mink, the 'coon, the 'possum, the rabbit — would thrive and be happy forever on the very edges of the towns and cities. Instead of a hindrance, houses and farms, roads and railways are a help to the wild animals, affording them food and shelter as their natural conditions never could. So, at least, it seems; for here on Mullein Hill, hardly twenty miles from the heart of Boston, there are more wild animals than I know what to do with — just as if the city of Boston were a big skunk farm or fox farm, from which the countryside all around (particularly my countryside) were being continually restocked.

But then, if I seem to have more foxes than a man of chickens needs to have, it is no wonder, living as I do on a main traveled road in Foxland, a road that begins off in the granite ledges this side of Boston, no one knows where, and, branching,

doubling, turning, no one knows how many times, comes down at last along the trout brook to the street in front of my house, where, leaping the brook and crossing the street, it runs beside my foot-path, up the hill, to the mowing-field behind the barn.

When I say that last fall the hunters, standing near the brook where this wild-animal road and the wagon road cross, shot seven foxes, you will be quite ready to believe that this is a much-traveled road, this road of the foxes that cuts across my mowing-field; and also that I am quite likely to see the travelers, now and then, as they pass by.

So I am, especially in the autumn, when game grows scarce; when the keen frosty air sharpens the foxes' appetites, and the dogs, turned loose in the woods, send the creatures far and wide for — chickens!

For chickens? If you have chickens, I hope your chicken-coop does not stand along the side of a fox road, as mine does. For straight across the mowing-field runs this road of the foxes, then in a complete circle right round the chicken yard, and up the bushy ridge into the wood.

How very convenient! Very, indeed! And how thoughtful of me! Very thoughtful! The foxes appreciate my kindness; and they make a point of stopping at the hen-yard every time they pass this way.

It is interesting to know, too, that they pass this way almost every night, and almost every afternoon, and at almost every other odd time, so that the hens, with hundreds of grubby acres to scratch in, have to be fenced within a bare narrow yard, where they can only be *seen* by the passing foxes.

Even while being driven by the dogs, when naturally they are in something of a hurry, the foxes will manage to get far enough ahead of the hounds to come by this way and saunter leisurely around the coop.

I have a double-barreled gun and four small boys; but terrible as that combination sounds, it fails somehow with the foxes. It is a two-barreled-four-boyed kind of a joke to them. They think that I am fooling when I blaze away with both barrels at them. But I am not. Every cartridge is loaded with BB shot. But that only means *Blank-Blank* to them, in spite of all I can do. The way they jump when the gun goes off, then stop and look at me, is very irritating.

This last spring I fired twice at a fox, who jumped as if I had hit him (I must have hit him), then turned himself around and looked all over the end of the barn to see where the shots were coming from. They were coming from the back barn window, as he saw when I yelled at him.

It was an April morning, cold and foggy, so cold and foggy and so very early that my chattering teeth, I think, disturbed my aim.

It must have been about four o'clock when one of the small boys tiptoed into my room and whispered, "Father, quick! there's a fox digging under Pigeon Henny's coop behind the barn."

I was up in a second, and into the boys' room. Sure enough, there in the fog of the dim morning I could make out the moving form of a fox. He was digging under the wire runway of the coop.

The old hen was clucking in terror to her chicks. It was she who had awakened the boys.

There was no time to lose. Downstairs I went, down into the basement, where I seized the gun, and, slipping in a couple of shells, slid out of the cellar door and crept stealthily into the barn.

The back window was open. The thick wet fog poured in like dense smoke. I moved swiftly in my bare feet and peered down upon the field. There stood the blur of the coop,— a dark shadow only in the fog,—but where was the fox?

Pushing the muzzle of my double-barreled gun across the window-sill, I waited. And there in the mist stood the fox, reaching in with his paw under the wire that inclosed the coop.

Carefully, deliberately, I swung the gun on the window-sill until the bead drew dead upon the thief; then, fixing myself as firmly as I could with bare feet, I made sure of my mark and fired.

I do not wonder that the fox jumped. I jumped, myself, as both barrels went off together. A gun is

a sudden thing at any time of day, but so early in the morning, and when everything was wrapped in silence and ocean fog, the double explosion was extremely startling.

The fox jumped, as naturally he would. When, however, he turned deliberately around and looked all over the end of the barn to see where I was firing from, and stood there, until I shouted at him — I say it was irritating.

But I was glad, on going out later, to find that neither charge of shot had hit the coop. The coop was rather large, larger than the ordinary coop; and taking that into account, and the thick, uncertain condition of the atmosphere, I had not made a bad shot after all. It was something not to have killed the hen.

But the fox had killed eleven of the chicks. One out of the brood of twelve was left. The rascal had dug a hole under the wire; and then, by waiting as they came out, or by frightening them out, had eaten them one by one.

There are guns and guns, and some, I know, that shoot straight. But guns and dogs and a dense population have not yet availed here against the fox.

One might think, however, when the dogs are baying hard on the heels of a fox, that one's chickens would be safe enough for the moment from that particular fox. But there is no pack of hounds hunting in these woods swift enough or keen enough to

match the fox. In literature the cunning of the fox is very greatly exaggerated. Yet it is, in fact, more than equal to that of the hound.

A fox, I really believe, enjoys an all-day run before the dogs. And as for house dogs, I have seen a fox, that was evidently out for mischief and utterly tired of himself, come walking along the edge of the knoll here by the house, and, squatting on his haunches, yap down lonesomely at the two farm dogs below.

This very week I heard the hounds far away in the ledges. I listened. They were coming toward me, and apparently on my side of the brook. I had just paused at the corner of the barn when the fox, slipping along the edge of the woods, came loping down to the hen-yard within easy gun-shot of me. He halted for a hungry look at the hens through the wire fence, then trotted slowly off, with the dogs yelping fully five minutes away in the swamp.

How many minutes would it have taken that fox to snatch a hen, had there been a hen on *his* side of the fence? He could have made chicken-sandwiches of a hen in five minutes, could have eaten them, too, and put the feathers into a bolster — almost! How many of my hens he has made into pie in less than five minutes!

As desserts go, out of doors, he has a right to a pie for fooling the dogs out of those five crowded minutes. For he does it against such uneven odds,

and does it so neatly — sometimes so very thrillingly! On three occasions I have seen him do the trick, each time by a little different dodge.

One day, as I was climbing the wooded ridge behind the farm, I heard a single foxhound yelping at intervals in the hollow beyond. Coming cautiously to the top, I saw the hound below me beating slowly along through the bare sprout-land, half a mile away, and having a hard time holding to the trail. Every few minutes he would solemnly throw his big black head into the air, stop stock-still, and yelp a long doleful yelp, as if begging the fox to stop its fooling and try to leave a reasonable trail.

The hound was walking, not running; and round and round he would go, off this way, off that, then back when, catching the scent again, he would up with his muzzle and howl for all the woods to hear. But I think it was for the fox to hear.

I was watching the curious and solemn performance, and wondering if the fox really did hear and understand, when, not far from me, on the crown of the ridge, something stirred.

Without moving so much as my eyes, I saw the fox, a big beauty, going slowly and cautiously round and round in a small circle among the bushes, then straight off for a few steps, then back in the same tracks; off again in another direction and back again; then in and out, round and round, until, springing lightly away from the top of a big stump

near by, the wily creature went gliding swiftly down the slope.

The hound with absolute patience worked his sure way up the hill to the circle and began to go round and round, sniffling and whimpering to himself, as I now could hear; sniffling and whimpering with impatience, but true to every foot-print of the trail. Round and round, in and out, back and forth, he went, but each time in a wider circle, until the real trail was picked up, and he was away with an eager cry.

I once again saw the trick played, so close to me, and so deliberately, with such cool calculating, that it came with something of a revelation to me of how the fox may feel, of what may be the state of mind in the wild animal world.

It was a late October evening, crisp and clear, with a moon almost full. I had come up from the meadow to the edge of the field behind the barn, and stood leaning back upon a short-handled hay-fork, looking. It was at everything that I was looking — the moonlight, the gleaming grass, the very stillness, so real and visible it seemed at the falling of this first frost. I was listening too, when, as far away as the stars, it seemed, came the cry of the hounds.

You have heard at night the passing of a train beyond the mountains? the sound of thole-pins round a distant curve in the river? the closing of a

barn door somewhere down the valley? Strange it may seem to one who has never listened, but the far-off cry of the hounds is another such friendly and human voice, calling across the vast of the night.

They were coming. How clear their tones, and bell-like! How mellow in the distance, ringing on the rim of the moonlit sky, as round the sides of a swinging silver bell. Their clanging tongues beat all in unison, the sound rising and falling through the rolling woodland, and spreading like a curling wave as the pack broke into the open over the level meadows.

I waited. Rounder, clearer, came the cry. I began to pick out the individual voices as now this one, now that, led the chorus across some mighty measure of The Chase.

Was it a twig that broke? Some brittle oak leaf that cracked in the path behind me? A soft sound of feet! Something breathed, stopped, came on — and in the moonlight before me stood the fox!

The dogs were coming, but I was standing still. And who was I, anyway? A stump? A post? No, he saw instantly that I was more than an ordinary post. How much more?

The dogs were coming!

"Well," said he, as plainly as anything was ever said, "I don't know what you are. But I will find out." And up he came and sniffed at my shoes. "This is odd," he went on, backing carefully off and sitting

down on his tail in the edge of a pine-tree shadow. "Odd indeed. Not a stump; not a man, in spite of appearances, for a man could never stand still so long as that."

The dogs were crashing through the underbrush below, their fierce cries quivering through the very trees about me.

The fox got up, trotted back and forth in front of me for the best possible view, muttering, "Too bad! Too bad! What an infernal nuisance a pack of poodles can make of themselves at times! Here is something new in the woods, and smells of the hen-yard, as I live! Those silly dogs!" and trotting back, down the path over which he had just come, he ran directly toward the coming hounds, leaped off into a pile of brush and stones, and vanished as the hounds rushed up in a yelping, panting whirl about me.

Cool? Indeed it was! He probably did not stop, as soon as he was out of sight, and make faces at the whole pack. But that is because they have politer ways in Foxland.

It is no such walking-match as this every time. It is nip and tuck, neck and neck, a dead heat sometimes, when only his superior knowledge of the ground saves the fox a whole skin.

Perhaps there are peculiar conditions, at times, that are harder for the fox than for the dogs, as when the undergrowth is all adrip with rain or dew,

"OVER THE HILL IN A WHIRLWIND OF DUST AND HOWLS"

and every jump forward is like a plunge overboard. His red coat is longer than the short, close hair of the hound, and his big brush of a tail, heavy with water, must be a dragging weight over the long hard course of the hunt. If wet fur to him means the same as wet clothes to us, then the narrow escape I witnessed a short time ago is easily explained. It happened in this way:—

I was out in the road by the brook when I caught the cry of the pack; and, hurrying up the hill to the "cut," I climbed the gravel bank for a view down the road each way, not knowing along which side of the brook the chase was coming, nor where the fox would cross.

Not since the Flood had there been a wetter morning. The air could not stir without spilling; the leaves hung weighted with the wet; the very cries of the hounds sounded thick and choking, as the pack floundered through the alder swamp that lay at the foot of the hill where I was waiting.

There must be four or five dogs in the pack, I thought; and surely now they are driving down the old runway that crosses the brook at my meadow.

I kept my eye upon the bend in the brook and just beyond the big swamp maple, when there in the open road stood the fox.

He did not stand; he only seemed to, so suddenly and unannounced had he arrived. Not an instant had he to spare. The dogs were smashing through the

briars behind him. Leaping into the middle of the road, he flew past me straight up the street, over the ridge, and out of sight.

I turned to see the burst of the pack into the road, when flash! a yellow streak, a rush of feet, a popping of dew-laid dust in the road, and back was the fox, almost into the jaws of the hounds, as he shot into the tangle of wild grapevines around which the panting pack was even then turning!

With a rush that carried them headlong past the grapevines, the dogs struck the warm trail in the road and went up over the hill in a whirlwind of dust and howls.

They were gone. The hunt was over for that day. Somewhere beyond the end of the doubled trail the pack broke up and scattered through the woods, hitting a stale lead here and there, but not one of them, so long as I waited, coming back upon the right track to the grapevines, through whose thick door the hard-pressed fox had so narrowly won his way.

CHAPTER III

IN THE TOADFISH'S SHOE

I WAS winding up my summer vacation with a little fishing party all by myself, on a wharf whose piles stood deep in the swirling waters from Buzzards Bay. My heavy-leaded line hummed taut in the swift current; my legs hung limp above the water; my back rested comfortably against a great timber that was warm in the September sun.

Exciting? Of course not. Fishing is fishing — any kind of fishing is fishing to me. But the kind I am most used to, and the kind I like best, is from the edge of a wharf, where my feet dangle over, where my "throw-out" line hums taut over my finger, in a tide that runs swift and deep and dark below me.

For what may you not catch in such dark waters? And when there are no "bites," you can sit and wait; and I think that sitting and waiting with my back against a big warm timber is just as much fun now as it used to be when I was a boy.

But after all it is fish that you want when you

go fishing; and it is exciting, moreover, just to sit as I was sitting on the wharf, with all the nerves of your body concentrated in the tip of your right forefinger, under the pressure of your line. For how do you know but that the next instant you may get a bite? And how do you know what the fish may be?

When you whip a trout stream for trout — why, you expect trout; when you troll a pond for pickerel, you expect pickerel; but when you sit on a wharf with your line far out in big, deep waters — why, you can expect almost anything — except shoes!

Shoes? Yes, old shoes!

As I sat there on the wharf of Buzzards Bay, there was suddenly a sharp tug at my line. A short quick snap, and I hooked him, and began quickly hauling him in.

How heavily he came! How dead and stupid! Even a flounder or a cod would show more fight than this; and very naturally, for on the end of my line hung an old shoe!

"Well," I thought, "I have fished for soles, and down on the Savannah I have fished for 'gators, but I never fished for shoes before"; and taking hold of my big fish (for it must have been a No. 12 shoe), I was about to feel for the hook when I heard a strange grunting noise inside, and nearly tumbled overboard at sight of two big eyes and a monstrous head filling the whole inside of the shoe!

"In the name of Davy Jones!" I yelled, flinging line and shoe and *thing* (whatever it might be) far behind me, "I've caught the Old Man of the Sea with his shoe on!" And, scrambling to my feet, I hurried across the wharf to see if it really were a fish that now lay flapping close beside the shoe.

It was really a fish; but it was also a hobgoblin, nightmare, and ooze-croaker!—if you know what that is!

I had never seen a live toadfish before, and it is small wonder that I sighed with relief to see that he had unhooked himself; for he looked not only uncanny, but also dangerous! He was slimy all over, with a tremendous head and a more tremendous mouth (if that could be), with jaws studded on the inside with rows of sharp teeth, and fringed on the outside with folds of loose skin and tentacles. Great glaring eyes stared at me, with ragged bits of skin hanging in a ring about them.

Ugly? Oh, worse than ugly? Two thirds of the monster was head; the rest, a weak, shapeless, slimy something with fins and tail, giving the creature the appearance of one whose brain had grown at the expense of the rest of his body, making him only a kind of living head.

I looked at him. He looked at me, and croaked.

"I don't understand you," said I, and he croaked again. "But you are alive," said I; "and God made you, and therefore you ought not to look so ugly to

me," and he flapped in the burning sun and croaked again.

Stooping quickly, I seized him, crowded him back into the old shoe, and dipped him under water. He gasped with new life and croaked again.

"Now," said I, "I begin to understand you. That croak means that you are glad to taste salt water again"; and he croaked again, and I dipped him in again.

Then I looked him over thoughtfully. He was about fifteen inches long, brown in color, and coarsely marbled with a darker hue, which ran along the fins in irregular wavy lines.

"You are odd, certainly, and peculiar, and altogether homely," said I; "but really you are not very ugly. Ugly? No, you are *not* ugly. How could anybody be ugly with a countenance so wise and learned? —so thoughtful and meditative?" And the toadfish croaked and croaked again. And I dipped him in again, and understood him better, and liked him better all the time.

Then I took him in his shoe to the edge of the wharf.

"I am glad to have made your acquaintance, sir," said I. "If I come this way next summer, I shall look you up; for I want to know more about you. Good-by." And I heard him croak "Good-by," as he and his shoe went sailing out and dropped with a splash into the deep dark water of the Bay.

"HERE I FOUND HIM KEEPING HOUSE"

I meant what I said, and the next summer, along the shores of the Bay I hunted him up. He was not in an old shoe this time, but under certain rather large stones that lay just below ebb-tide mark, so that they were usually, though not always, covered with water. Here I found him keeping house; and as I was about to keep house myself, my heart really warmed to him.

I was understanding him more and more, and so I was liking him better and better. Ugly? Wait until I tell you what the dear fellow was doing.

He was keeping house, and he was keeping it all alone! Now listen, for this is what I learned that summer about the strange habits of Mrs. Toadfish, and the handsome behavior of her husband.

It is along in June that the toadfish of our New England bays begin to look round for their summer homes. As far as we now know, it is the female who makes the choice and leaves her future mate to find her and her home. A rock is usually chosen, always in shallow water, and sometimes so far up on the shore that at low tide it is left high and almost dry. The rock may vary in size from one as small as your hat up to the very largest.

Having selected the place for her nest, she digs a pathway down under the rock, and from beneath scoops out a hollow quite large enough to swim round in. This completes the nest, or more properly burrow, in which her little toadfish babies are to be reared.

She now begins to lay the eggs, but not in the sand, as one would suppose; she deliberately pastes them on the under surface of the rock. Just how she does this no one knows.

The eggs are covered with a clear, sticky paste which hardens in contact with water, and is the means by which the mother sticks them fast to the rock. This she must do while swimming on her back, fastening one egg at a time, each close beside its neighbor in regular order, till all the cleared surface of the rock is covered with hundreds of beautiful amber eggs, like drops of pure, clear honey.

The eggs are about the size of buckshot; and, curiously enough, when they hatch, the young come out with their heads all turned in the same direction. Does the mother know which is the head end of the egg? Or has some strange power drawn them around? Or do they turn themselves for some reason?

It will be noticed, in lifting up the rocks, that the heads of the fish are always turned toward the entrance to their nest, through which the light and fresh water come; and it is quite easy to see that these two important things have much to do with the direction in which the little fish are turned.

After Mrs. Fish has finished laying her eggs, her maternal cares are over. She leaves both eggs and cares to the keeping of Mr. Fish, swims off, and crawls into a tin can — or old shoe! — to meditate in sober satisfaction for the rest of the summer.

So it was *she* that I caught, and not the gallant Mr. Toadfish at all! I am glad of it. I have a deal of sympathy and down-right admiration for Mr. Fish. He behaves most handsomely.

However, Mrs. Fish is very wise, and could not leave her treasures in better keeping. If ever there was a faithful parent, it is a Father Toadfish. For three weeks he guards the eggs before they hatch out, and then they are only half hatched; for it has taken the little fish all this time to get out on the top side of the eggs, to which they are still attached by their middles, so that they can move only their heads and tails.

They continue to wiggle in this fashion for some weeks, until the yolk of the egg is absorbed, and they have grown to be nearly half an inch long. They are then free from the rock and swim off, looking as much like their parents as children can, and every bit as ugly.

Ugly? Did I say ugly? Is a baby ever ugly to its mother? Or a baby toadfish to its father? No. You cannot love a baby and at the same time see it ugly. You cannot love the out of doors with all your *mind* as well as with all your heart, and ever see it ugly.

All this time the father has been guarding the little toadfish; and if, during the whole period, he goes out to get a meal, I have not been able to find when it is, for I always find him at home, minding the babies.

The toadfish lives entirely unmolested by enemies, so far as I can learn; and his appearance easily explains the reason of it. I know of nothing that would willingly enter a croaking, snapping, slimy toadfish's nest to eat him; and it takes some courage to put one's hand into his dark hole and pull him out.

His principal diet seems to be shrimp, worms and all kinds of small fish. Yet he may be said to have no principal diet; for, no matter what you are fishing for, or what kind of bait you are using, if there is a toadfish in the vicinity you are sure to catch him. If fishing along a wharf in September, you may catch the fish, and an old shoe along with him — with *her*, perhaps I should say.

And if you do, please notice how wise and thoughtful the face, how beautifully marbled the skin, how courageous the big strong jaw!

Ugly? Not if you will put yourself in the toadfish's shoe.

CHAPTER IV

A CHAPTER OF THINGS TO SEE THIS FALL

I

YOU ought to see the sky — every day. You ought to see, as often as possible, the breaking of dawn, the sunset, the moonrise, and the stars. Go up to your roof, if you live in the city, or out into the middle of the Park, or take a street-car ride into the edge of the country — just to see the moon come up over the woods or over a rounded hill against the sky.

II

You ought to see the light of the October moon, as it falls through a roof of leafless limbs in some silent piece of woods. You have seen the woods by daylight; you have seen the moon from many places; but to be in the middle of the moonlit woods after the silence of the October frost has fallen is to have one of the most beautiful experiences possible out of doors.

III

You ought to see a wooded hillside in the glorious colors of the fall — the glowing hickories, the deep

flaming oaks, the cool, dark pines, the blazing gums and sumacs! Take some single, particular woodland scene and look at it until you can see it in memory forever.

IV

You ought to see the spiders in their airships, sailing over the autumn meadows. Take an Indian

Summer day, lazy, hazy, sunny, and lie down on your back in some small meadow where woods or old rail fences hedge it around. Lie so that you do not face the sun. The sleepy air is heavy with balm and barely moves. Soon shimmering, billowing, through the light, a silky skein of cobweb will come floating over. Look sharply, and you will see the little aëronaut swinging in his basket at the bottom of the balloon, sailing, sailing —

Away in the air —
Far are the shores of Anywhere,
Over the woods and the heather.

V

You ought to see (only *see*, mind you,) on one of these autumn nights, when you have *not* on your party clothes — you ought to see a "wood pussy." A wood pussy is not a house pussy; a wood pussy is a wood pussy; that is to say, a wood pussy is a — *skunk!* Yes, you ought to see a skunk walking calmly along a moonlit path and not caring a fig for you. You will perhaps never meet a wild buffalo or a grizzly bear or a jaguar in the woods nearest your house; but you may meet a wild skunk there, and have the biggest adventure of your life. Yes, you ought to see a skunk some night, just for the thrill of meeting a wild creature that won't get out of your way.

VI

You ought to see the witch-hazel bush in blossom late in November. It is the only bush or tree in the woods that is in full bloom after the first snow may have fallen. Many persons who live within a few minutes' walk of the woods where it grows have never seen it. But then, many persons who live with the sky right over their heads, with the dawn breaking right into their bedroom windows, have never seen the sky or the dawn to think about them, and wonder at them! There are many persons who have

never seen anything at all that is worth seeing. The witch-hazel bush, all yellow with its strange blossoms in November, is worth seeing, worth taking a great deal of trouble to see.

There is a little flower in southern New Jersey called pyxie, or flowering moss, a very rare and hidden little thing; and I know an old botanist who traveled five hundred miles just to have the joy of seeing that little flower growing in the sandy swamp along Silver Run. If you have never seen the witch-hazel in bloom, it will pay you to travel five hundred and five miles to see it. But you won't need to go so far, — unless you live beyond the prairies, — for the witch-hazel grows from Nova Scotia to Florida and west to Minnesota and Alabama.

There is one flower that, according to Mr. John Muir (and he surely knows!), it will pay one to travel away up into the highest Sierra to see. It is the fragrant Washington lily, "the finest of all the Sierra lilies," he says. "Its bulbs are buried in shaggy chaparral tangles, I suppose for safety from pawing bears; and its magnificent panicles sway and rock over the top of the rough snow-pressed bushes, while big, bold, blunt-nosed bees drone and mumble in its polleny bells. A lovely flower worth going hungry and footsore endless miles to see. The whole

"A WILD CREATURE THAT WON'T GET OUT OF YOUR WAY"

world seems richer now that I have found this plant in so noble a landscape."

And so it seemed to the old botanist who came five hundred miles to find the tiny pyxie in the sandy swamps of southern New Jersey. So it will seem to you — the whole world will not only *seem* richer, but will *be* richer for you — when you have found the witch-hazel bush all covered with summer's gold in the bleak woods of November.

VII

You ought to see a big pile of golden pumpkins in some farmhouse shed or beside the great barn door.

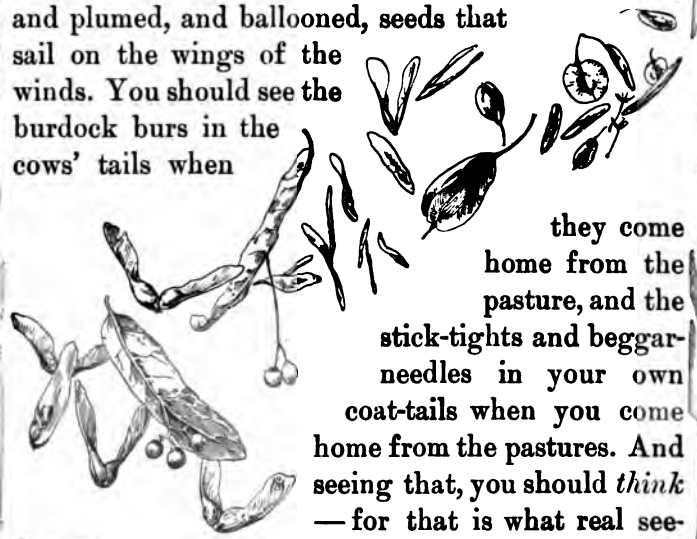
You ought to see a field of corn in the shock; hay in a barn mow; the jars of fruit, the potatoes, apples, and great chunks of wood in the farmhouse cellar. You ought to see how a farmer gets ready for the winter — the comfort, the plenty, the sufficiency of it all!

VIII

You ought to see how the muskrats, too, get ready for the winter, and the bees and the flowers and the trees and the frogs — everything. Winter is coming. The cold will kill — if it has a chance. But see how it has no chance. How is it that the bees will buzz, the flowers open, the birds sing, the frogs croak again next spring as if there had been no freezing, killing weather? Go out and see why for yourselves.

IX

You ought to see the tiny seed "birds" from the gray birches, scattering on the autumn winds; the thistledown, too; and a dozen other of the winged, and plumed, and ballooned, seeds that sail on the wings of the winds. You should see the burdock burs in the cows' tails when they come home from the pasture, and the stick-tights and beggar-needles in your own coat-tails when you come home from the pastures. And seeing that, you should *think* — for that is what real see-



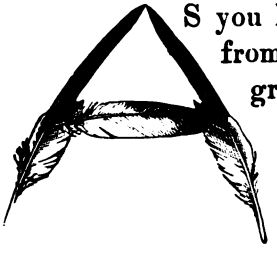
ing means. Think what? Why, that you are just as good as a cow's tail to scatter Nature's seeds for her, and not a bit better, as she sees you.

X

You ought to see the migrating birds as they begin to flock on the telegraph wires, in the chimneys, and among the reeds of the river. You ought to see the swallows, blackbirds, robins, and bluebirds, as they flock together for the long southern flight. There are days in late September and in early October when the very air seems to be half of birds, especially toward nightfall, if the sun sets full and clear: birds going over; birds diving and darting about you; birds along the rails and ridge-poles; birds in the grass under your feet — birds everywhere. You should be out among them where you can see them. And especially you should see — without fail, this autumn and every autumn — the wedge of wild geese cleaving the dull gray sky in their thrilling journey down from the far-off frozen North.

CHAPTER V

WHIPPED BY EAGLES



S you head into Maurice River Cove from Delaware Bay by boat, the great eagle's nest of Garren's Neck Swamp soon looms into view. It is a famous nest, and an ancient nest; for it has a place in the chart of every boat that sails up the river, and has had for I don't know how many years. From the river side of the long swamp the nest is in sight the year round, but from the land side, and from the house where we lived, the nest could be seen only after the leaves of the swamp had fallen. Then all winter long we could see it towering over the swamp; and often, in the distance, we could see the eagles coming and going or soaring in mighty circles high up in the air above it.

That nest had a strange attraction for me. It was the home of eagles, the monarchs of this wide land of swamp and marsh and river.

Between me and the great nest lay a gloomy gum swamp, wet and wild, untouched by the axe and untraveled, except in winter by the coon-hunters. The

swamp began just across the road that ran in front of the house; and often at night I would hear the scream of a wild cat in the dark hollows; and once I heard the *pat, pat* of its feet as it went leaping along the road.

Then beyond the swamp and the nest stretched a vast wild marsh-land, where the reeds grew, and the tides came in, and the mud-hens lived. And beyond that flowed the river, and beyond the river lay another marsh, and beyond the marsh another swamp. And over all this vast wild world towered the nest of the eagles, like some ancient castle; and over it all — swamp and marsh and river — ruled the eagles, as bold and free as the mighty barons of old.

Is it any wonder that I often found myself gazing away at that nest on the horizon and longing for wings? — for wings with which to soar above the swamp and the bay and the marsh and the river, to circle about and about that lofty eyrie, as wild as the eagles and as free? Is it any wonder that I determined some day to stand up in that nest, wings or no wings, while the eagles should scream about me, and away below me should stretch river and marsh and swamp?

To stand up in that nest, to yell and wave my arms with the eagles wheeling and screaming over me, became the very peak of my boy ambitions.

And I did it. I actually had the eggs of those eagles in my hands. I got into the nest; but I am

glad even now that I got out of the nest and reached the ground.

It must have been in the spring of my fourteenth year when, at last, I found myself beneath the eagle tree. It was a stark old white oak, almost limbless, and standing out alone on the marsh some distance from the swamp. The eagle's nest capped its very top.

The nest, I knew, must be big; but not until I had climbed up close under it did I realize that it was the size of a small haystack. There was certainly half a cord of wood in it. I think that it must originally have been built by fish hawks.

Holding to the forking top upon which the nest was placed, I reached out, but could not touch the edge from any side.

I had come determined to get up into it, however, at any hazard; and so I set to work. I never thought of how I was to get down; nor had I dreamed, either, of fearing the eagles. A bald eagle is a bully. I would as soon have thought of fearing our hissing old gander at home.

As I could not get out to the edge of the nest and scale the walls, the only possible way up, apparently, was through the nest. The sticks here in the bottom were old and quite rotten. Digging was easy, and I soon had a good beginning.

The structure was somewhat cone-shaped, the smaller end down. It had grown in circumference as

it grew in years and in height, probably because at the bottom the building materials had decayed and gradually fallen away, until now there was a decided outward slant from bottom to top. It had grown lopsided, too, there being a big bulge on one side of the nest near the middle.

The smallness of the bottom at first helped me; there was less of the stuff to be pulled out. I easily broke away the dead timbers and pushed aside the tougher sticks. I intended to cut a channel clear to the top and go up through the nest. Already my head and shoulders were well into it.

Now the work became more difficult. The sticks were newer, some of them being of seasoned oak and hickory, which the birds had taken from cord-wood piles.

I had cut my channel up the side of the nest nearly halfway when I came to a forked branch that I could neither break off nor push aside. I soon found that it was not loose, but that it belonged to the oak tree itself. It ran out through the nest horizontally, extending a little more than a foot beyond the rough walls.

Backing down, I saw that this fork was the support of the bulge that had given the nest its lopsided appearance. A few large timbers had been rested across it, small loose pieces had gradually lodged upon these, and thus in time brought about the big bulge.

I pushed off this loose stuff and the few heavy timbers and found that the fork would bear my weight. It now projected a little way from the walls of the nest. I got a firm hold on the forks out at their ends, swung clear, and drew myself up between them. After a lively scramble, I got carefully to my feet, and, clutching the sticks protruding from the side, stood up, with my eyes almost on a level with the rim of the great nest. This was better than cutting a channel, certainly — at least for the ascent, and I was not then thinking of the descent.

I looked over the protruding sticks of the rim. I caught a glimpse of large dull white eggs!

Eggs of shining gold could not have so fascinated me. There were thousands of persons who could have gold eggs if they cared. But eagles' eggs! Money could not buy such a sight as this.

I was more than ever eager now to get into the nest. Working my fingers among the sticks of the rim for a firm grip, I stuck my toes into the rough wall and began to climb. At some considerable hazard and at the cost of many rents in my clothing, I wriggled up over the edge and into the hollow of the nest where the coveted eggs lay.

The eagles were wheeling and screaming overhead. The weird *cac, cac, cac* of the male came down from far above me; while the female, circling closer, would swoop and shrill her menacing, maniacal half-laugh almost in my ears.

Their wild cries thrilled me, and their mighty wings, wheeling so close around me, seemed to catch me in their majestic sweep and almost to carry me in swift, swinging circles through the empty air. An ecstasy of excitement overcame me. I felt no body, no weight of anything. I lost my head completely, and, seizing the eggs, rose to my feet and stood upright in the nest.

The eagles swept nearer. I could feel the wind from their wings. I could see the rolling of their gleaming eyes, and the glint of the sun on their snow-white necks. And as they dipped and turned and careened over me, I came perilously near trying to fly myself.

What a scene lay under me and rolled wide and free to the very edge of the world! The level marsh, the blue, hazy bay, the far-off, unblurred horizon beyond the bending hill of the sea! The wild, free wind from the bay blew in upon my face, the old tree trembled and rocked beneath me, the screaming eagles wove a mazy spell of double circles about me, till I screamed back at them in wild delight.

The sound of my voice seemed to infuriate the birds. The male turned suddenly in his round and swooped directly at me. The movement was instantly understood by his mate, who, thus emboldened, cut under him and hurled herself downward, passing with a vicious grab at my face. I dodged, or she would have hit me.

For the moment I had forgotten where I stood; and, in dodging the eagle, I almost stepped over the edge of the nest. I caught my balance and dropped quickly to my knees, completely unnerved.

Fear like a panic took instant hold on me. Only one desire possessed me — to get down. I crept to the edge and looked over. The sight made me dizzy. Sixty feet of almost empty air! Far down, a few small limbs intervened between me and the ground. But there was nothing by which to descend.

I was dismayed; and my expression, my posture — something, betrayed my confusion to the eagles. They immediately lost all dread of me. While I was looking over, one of them struck me a stinging blow on the head, knocking my cap off into the air.

That started me. I must climb down or be knocked over. If only I had continued with my channel to the top! If only that forked branch by which I ascended were within reach! But how could I back over the flaring rim to my whole length and swing my body under against the inward-slanting nest until my feet could touch the fork? But if I ever got down, that was what I must do; for the eagles gave me no chance to cut a channel now.

Laying the eggs back for the time in the hollow, I began tearing away the rim of the nest in order to clear a place over which to back down.

I was momentarily in danger of being hurled off by the birds; for I could not watch them and work,

"ONE OF THE EAGLES STRUCK ME A STINGING BLOW ON THE HEAD"

too. And they were growing bolder with every dash. One of them, driving fearfully from behind, flattened me out on the nest. Had the blow been delivered from the front, I should have been knocked headlong to the ground.

I was afraid to delay longer. A good-sized breach was opened in the rim of the nest by this time. And now, if the sticks would not pull out, I might let myself over and reach the fork. Once my feet touched that, I could manage the rest, I knew.

Digging my hands deep into the nest for a firm hold, I began cautiously to back over the rough, stubby rim, reaching with my feet toward the fork.

The eagles seemed to appreciate the opportunity my awkward position offered them. I could not have arranged myself more conveniently to their minds, I am sure. And they made the most of it. I can laugh now; but the memory of it can still make me shiver, too.

I had wriggled over just so that I could bend my body at the waist and bring my legs against the nest when a sharp stub caught in my clothes and held me. I could get neither up nor down. My handhold was of the most precarious kind, and I dared not let go for a moment to get off the snag.

I tried to back out and push off from it, but it seemed to come out with me. It must be broken; and pulling myself up, I dropped with all the force I could put into my body. That loosened, but did

not break it. Suddenly, while I was resting between the efforts, the thing gave way.

I was wholly unprepared. All my weight was instantly thrown upon my hands. The jagged sticks cut into my wrists, my grip was pried off, and I fell.

Once, twice, the stubs in the wall of the nest caught and partly stopped me, then broke. I clutched frantically at them, but could not hold. Then, almost before I realized that I was falling, I hung suspended between two limbs — the forks of the white oak branch in the side of the nest.

I had been directly above it when the stub broke, and had fallen through it; and the two branches had caught me right under both of my arms.

For a second I was too dazed to think. Then a swish of wings, a hard blow on the neck, and a shooting pain made my position clear. I was not down yet nor out of danger. The angry birds still had me in reach.

Hanging with one arm, I twisted round until the other arm was free, then seized the branches and swung under, but not before the eagles had given me another raking dab.

Here beneath the branches, close up to the bottom of the nest, I was quite out of the reach of the birds; and through the channel I had cut in my ascent, I climbed quickly down into the tree.

It was now a mere matter of sliding to the ground. But I was so battered and faint that I nearly tum-

bled. I was a sorry-looking boy — my clothing torn, my hands bleeding, my head and neck clawed in a dozen places.

But what did I do with the eagles' eggs? Why, I allowed the old eagles to hatch them. What else could I do? or what better?

CHAPTER VI

THANKSGIVING AT GRANDFATHER'S FARM

THANKSGIVING at Grandfather's farm was more than a holiday. It was a great date on the calendar, for it divided the year in halves as no other single day of the three hundred and sixty-five did. It marked the end of the outdoors, and the beginning of the indoors — the day when everybody came home; when along with them into the house came all the outdoors, too, as if the whole farm were brought in to toast its toes before the great hearth fire!

For the hearth fire was big enough and cheery

enough. And so was the farmhouse — that is, if you added the big barn and the crib-house and the wagon-house and the dog-house and the hen-house and the "spring-house!"

Oh, there was plenty of room inside for everybody and for everything! And there needed to be; for did not everybody come home to Grandfather's for Thanksgiving? And did not everything that anybody could need for the winter, grow on Grandfather's farm?

And it all had to be brought in by Thanksgiving Day — everything brought in, everything housed and stored and battened down tight. The preparations began along in late October, continuing with more speed as the days shortened and darkened and hurried us into November. And they continued with still more speed as the gray lowering clouds thickened in the sky, and the wind began to whistle through the oak grove. Then, with the first real cold snap, the first swift flurry of snow, how the husking and the stacking and the chopping went on!

Thanksgiving must find us ready for winter indoors and out.

The hay-mows were full to the beams where the swallows built; the north and west sides of the barnyard were flanked with a deep wind-break of cornfodder that ran on down the old worm-fence each side of the lane in yellow zigzag walls; the big wooden pump under the turn-o'-lane tree by the barn

was bundled up and buttoned to the tip of its dripping nose; the bees by the currant bushes were doubled-hived, the strawberries covered with hay, the wood all split and piled, the cellar windows packed, and the storm-doors put on.

The very cows had put on an extra coat, and turned their collars up about their ears; the turkeys had changed their roost from the ridge-pole of the corn-crib to the pearmain tree on the sunny side of the wagon-house; the squirrels had finished their bulky nests in the oaks; the muskrats of the lower pasture had completed their lodges; the whole farm — house, barn, fields, and wood-lot — had shuffled into its greatcoat and muffler and settled comfortably down for the winter.

The old farmhouse was an invitation to winter. It looked its joy at the prospect of the coming cold. Low, weather-worn, mossy-shingled, secluded in its wayward garden of box and bleeding-hearts, sheltered by its tall pines, grape-vined, hop-vined, clung to by creeper and honeysuckle, it stood where the roads divided, halfway between everywhere, unpainted, unpretentious, as much a part of the landscape as the muskrat-lodge, and, like the lodge, roomy, warm, and hospitable.

Round at the back, under the wide, open shed, a door led into the kitchen; another led into the living-room; another, into the store-room; and two big, slanting double-doors, scoured and slippery with

"THE LANTERN FLICKERS, THE MILK FOAMS, THE STORIES FLOW"

four generations of sliders, covered the cavernous way into the cellar. But they let the smell of apples up, as the garret door let the smell of sage and thyme come down; while from the door of the store-room, mingling with the odor of apples and herbs, filling the whole house and all my early memories, came the smell of broom-corn, came the sound of Grandfather's loom.

For Grandfather in the winter made brooms — the best brooms, I think, that ever were made. The tall broom-corn was grown on the farm in the summer, ripened and cut and seeded, and then, as soon as winter set in, was loomed and wired and sewed into brooms.

But the cured and seeded broom-corn was not the main thing, after all, that was brought in for the winter. Behind the stove in the kitchen, stood the sweet-potato box (a sweet potato, you know, must be kept dry and warm). An ample, ten-barrel box it was, fresh-papered like the walls, full of Jersey sweets that *were* sweet — long, golden, syrupy potatoes, such as grow only in the warm sandy soil of southern New Jersey.

Against that big box in Grandmother's kitchen stood the sea-chest, fresh with the same kitchen paper and piled with wood. There was another such chest in the living-room near the old fireplace, and still another in Grandfather's work-room behind the "template" stove.

But wood and warmth and sweet smells were not all. There was music also, the music of life, of young life and of old life — grandparents, grandchildren (about twenty-eight of the latter). There were seven of us alone — a girl at each end of the seven and one in the middle. Thanksgiving always found us all at Grandfather's and brimming full of thanks.

That, of course, was long, long ago. Things are different nowadays. There are as many grandfathers, I suppose, as ever; but they don't make brooms in the winter and live on farms.

They live in flats. The old farm with its open acres has become a city street; the generous old farmhouse has become a speaking-tube, kitchenette, and bath — all the "modern conveniences"; the cows have evaporated into convenient cans of condensed "milk"; the ten-barrel box of potatoes has changed into a convenient ten-pound bag, the wood-pile into a convenient five-cent bundle of blocks tied up with a tarred string, the fireplace into a convenient gas log, the seven children into one or none, or into a little bull-terrier pup.

But is it so? No, it is not so — not so of a million homes. For there is many an old-fashioned farmhouse still in the country, and many a new-fashioned city house where there are more human children than little bull-terrier pups.

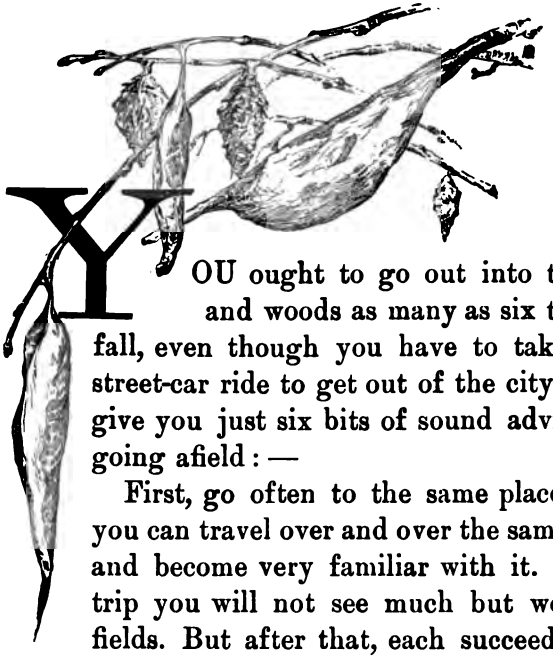
And it is not so in my home, which is neither a real farm nor yet a city home. For here are some

small boys who live very much as I did when I was a boy. No, they are not farmer's boys; for I am not a farmer, but only a "commuter" — if you know what that is. I go into a great city for my work; and when the day's work is done, I turn homeward here to Mullein Hill — far out in the country. And when the dark November nights come, I hang the lantern high in the stable, as my father used to do, while four shining faces gather round, as four small boys seat themselves on upturned buckets behind the cow. The lantern flickers, the milk foams, the stories flow — "Bucksy" stories of the noble red-man; and stories of the heroes of old; and marvelous stories of that greatest hero of all — their father, far away yonder when he was a boy, when there were so many interesting things to do on Grandfather's farm just before Thanksgiving Day.

CHAPTER VII

A CHAPTER OF THINGS TO DO THIS FALL

I



YOU ought to go out into the fields and woods as many as six times this fall, even though you have to take a long street-car ride to get out of the city. Let me give you just six bits of sound advice about going afield: —

First, go often to the same place, so that you can travel over and over the same ground and become very familiar with it. The first trip you will not see much but woods and fields. But after that, each succeeding walk will show you *particular* things — this dead tree with the flicker's hole, that old rail-pile with its rabbit-hole — until, by and by, you will know every turn and dip, every pile of stones, every hole and

nest; and you will find a thousand things that on the first trip you didn't dream were there.

Secondly, when you go into the woods, go *expecting* to see something in particular — always looking for some particular nest, bird, beast, or plant. You may not find that particular thing, but your eyes will be sharpened by your expectation and purpose, and you will be pretty sure therefore to see something. At worst you will come back with a disappointment, and that is better than coming back without a thing!

Thirdly, go off when you can alone. Don't be selfish, unsociable, offish — by no means that. But you must learn to use your own eyes and ears, think your own thoughts, make your own discoveries, and follow the hints and hopes that you alone can have. Go with the school class for a picnic, but for woodcraft go alone.

Fourthly, learn first of all in the woods to be as silent as an Indian and as patient as a granite rock. Practice standing still when the mosquitoes sing, and fixing your mind on the hole under the stump instead of the hole the mosquito is boring between your eyes.

Fifthly, go out in every variety of weather, and at night, as well as during the day. There are three scenes to every day — morning, noon, and early evening — when the very actors themselves are changed. To one who has never been in the fields at daybreak,

the world is so new, so fresh and strange, as to seem like a different planet. And then the evening — the hour of dusk and the deeper, darker night! Go once this autumn into the woods at night.

And lastly, don't go into the woods as if they were a kind of Noah's Ark; for you cannot enter the door and find all the animals standing in a row. You will go a great many times before seeing them all. Don't be disappointed if they are not so plentiful there as they are in your books. Nature books are like menageries — the animals are caught and caged for you. The woods are better than books and just as full of things, as soon as you learn to

take a hint, to read the signs, to put two and two together and get — four — four paws — black paws, with a long black snout, a big ringed and bushy tail — a coon!

II

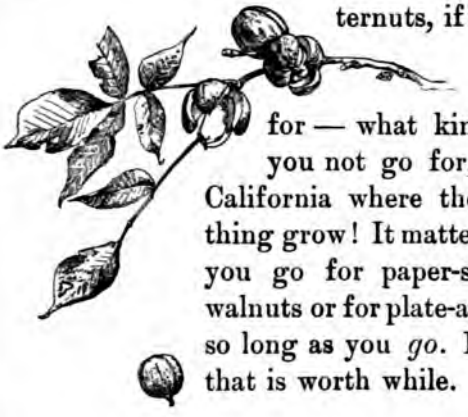
Whether you live in the heart of a great city or in the open country, you ought to begin this fall to learn the names and habits of the birds and beasts (snakes, lizards, turtles, toads!) that live wild in your region. Even when all the summer birds have gone south

for the winter, there will remain in your woods and fields crows, jays, juncos, tree sparrows, chickadees, kinglets, nuthatches, screech owls, barred owls, — perhaps even snowy owls, — quails, partridges, goldfinches, with now and then a flock of crossbills,

snow buntings, and other northern visitors, and even a flicker, robin, and bluebird left over from the fall migrations. These are plenty to begin on; and yet, as they are so few, compared with the numbers of the summer, the beginner's work is thus all the easier in the autumn.

III

You should go out one of these frosty mornings for chestnuts, if they grow in your woods; or for "shagbarks," if you live in New England; for black walnuts, if you live in the Middle States; for pecan nuts, if you live in the Gulf States; for but-



ternuts, if you live in the states of the Middle West; for — what kind of nuts can you not go for, if you live in California where they make everything grow! It matters little whether you go for paper-shelled English walnuts or for plate-armored pignuts so long as you *go*. It is the going that is worth while.

IV

You ought to go "cocooning" this fall — to sharpen your eyes. But do not go often; for once you begin to look for cocoons, you are in danger of seeing nothing else — except brown leaves. And how many brown leaves, that look like cocoons, there are! They tease you to vexation. But a day now and then "cocooning" will do you no harm; indeed, it will cultivate your habit of concentration and close seeing as will no other kind of hunting I know.

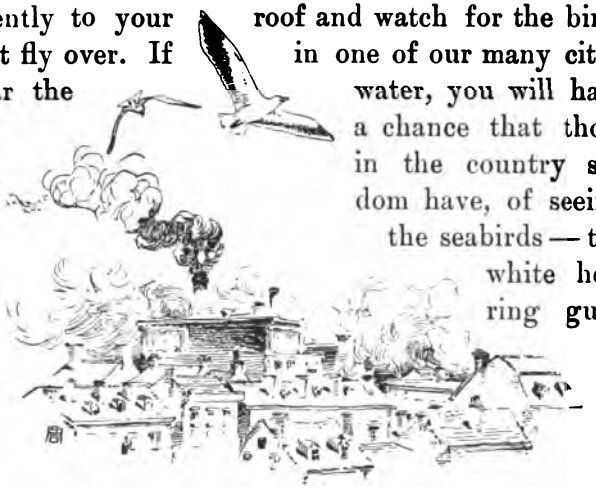
Bring home with you the big brown silky cocoons of cecropia — the largest cocoon you will find, lashed all along its length to its twig, and usually near the ground. Look on the black cherry, the barberry, sassafras, and roadside and garden trees for the harder, whiter cocoon of the promethea moth. This hangs by its tip, because the caterpillar

has begun his house by using the leaf, spinning it into the cocoon as part of its walls, much as does the wretched "brown-tail." The gray cocoons, or rather nests, of this "brown-tail" moth you must bring home to burn, for they are one of our greatest pests. You will find them full of tiny caterpillars as you tear them open.

Bring home your collection and, with the help of such a book as "Moths and Butterflies" by Mary C. Dickerson, identify them and hang them up for their "coming out" in the spring.

V

If you live in the city, you ought to go up frequently to your roof and watch for the birds that fly over. If in one of our many cities near the water, you will have a chance that those in the country seldom have, of seeing the seabirds — the white herring gulls



(the young gulls are brown, and look like a different

species), as they pass over whistling plaintively, and others of the wild seafowl, that merely to hear and see in the smoky air of the city, is almost as refreshing as an ocean voyage. Then there are the parks and public gardens — never without their birds and, at the fall migrating time, often sheltering the very rarest of visitors.

VI

In order to give point and purpose to one of these autumn outings, you should take your basket, or botanizing can, and scour the woods and fields for autumn berries. No bunch of flowers in June could be lovelier than the bunch of autumn berries that you can gather from thicket and wayside to carry home. And then, in order to enjoy the trip all over again, read James Buckham's exquisite story, "A Quest for Fall Berries," in his book, "Where Town and Country Meet."

VII

Take your botany can on a trip toward the end of November and see how many blossoming flowers you can bring home from the woods. Wild flowers *after* Thanksgiving in any northern state? Make the search, on all the southern slopes and in all the sheltered corners and see for yourselves. When you get back, you will want to read Mr. Bradford Torrey's account of the flowers that he found blossoming out of doors in New England in the month of November. But who is Mr. Bradford Torrey? and where can you find this account of his November walk? You do not know? Well, then there is something more for you to do this fall.

VIII

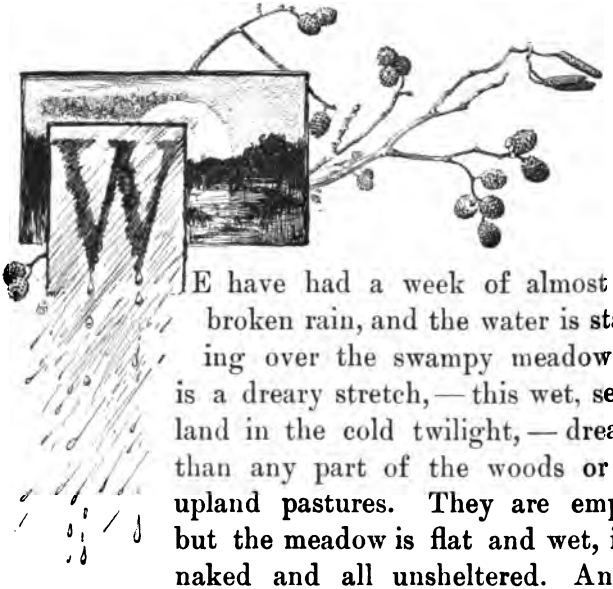
While you are finding out who Mr. Torrey is and what he has written, you should also get acquainted with John Burroughs, Olive Thorne Miller, Thoreau, Frank Bolles, William Hamilton Gibson, C. C. Abbott, Edward Breck, Gilbert White, and — but these will do for *this* fall. Don't fail to read dear old Gilbert White's "Natural History of Selborne"; though perhaps we grown-ups like it better than you may this fall. If you don't understand Gilbert White, then read this year "The Life of a Scotch Naturalist" by Samuel Smiles, and Arabella Buckley's two books, "Life and Her Children," and "Winners in Life's Race."

IX

You ought to tie up a piece of suet for the birds; keep your cat in the house, except during the middle of the day, and — but I shall tell you no more. There is no end to the interesting things to do in your study of the out of doors and in your tramps afield this autumn.

CHAPTER VIII

THE MUSKRATS ARE BUILDING



WE have had a week of almost unbroken rain, and the water is standing over the swampy meadow. It is a dreary stretch, — this wet, sedgy land in the cold twilight, — drearier than any part of the woods or the upland pastures. They are empty; but the meadow is flat and wet, it is naked and all unsheltered. And a November night is falling.

The darkness deepens. A raw wind is rising. At nine o'clock the moon swings round and full to the crest of the ridge, and pours softly over. I button my heavy ulster close, and in my rubber boots go down to the stream and follow it out to the middle of the meadow, where it meets the main ditch. There

is a sharp turn here toward the swamp; and here at the bend, behind a clump of black alders, I sit quietly down and wait.

I have come out to the bend to watch the muskrats building; for that small mound up the ditch is not an old haycock, but a half-finished muskrat house.

As I wait, the moon climbs higher over the woods. The water on the meadow shivers in the light. The wind bites through my heavy coat and drives me back, but not before I have seen one, two, three little creatures scaling the walls of the house with loads of mud-and-reed mortar. I am driven back by the cold, but not before I know that here in the desolate meadow is being rounded off a lodge, thick-walled and warm, and proof against the longest, bitterest of winters.

This is near the end of November. My fire-wood is in the cellar; I am about ready to put on the double-windows and the storm-doors. The muskrats are even now putting on theirs, for their house is all but finished. Winter is at hand: but we are prepared, the muskrats and I.

Throughout the summer the muskrats had no house, only their tunnels into the sides of the ditch, their roadways out into the grass, and their beds under the tussocks or among the roots of the old stumps. All those months the water was low in the ditch, and the beds among the tussocks were safe and dry enough.

Now the November rains have filled river and ditch, flooded the tunnels, and crept up into the beds under the tussocks. Even a muskrat will creep out of his bed when cold, wet water creeps in. What shall he do for shelter? He knows. And long before the rains begin, he picks out the place for a house. He does not want to leave his meadow, therefore the only thing to do is to build, — move from under the tussock out upon the top of the tussock; and here, in its deep, wiry grass, make a new bed high and dry above the rising water; and close this new bed in with walls that circle and dome, and defy the very winter.

Such a house will require a great deal of work to build. Why should not two or three muskrats combine — make the house big enough to hold them all, save labor and warmth, too, and, withal, live sociably together? So they left, each one his single bed, and, joining efforts, started, about the middle of October, to build this winter house.

Slowly, night after night, the domed walls have been rising, although for several nights at a time I could see no apparent progress with the work. The builders were in no hurry. The cold was far off. But it is coming, and to-night it feels near and keen. And to-night there is no loafing about the lodge.

When this house is done, when the last hod of mud plaster has been laid on, — then the rains may descend and the floods come, but it will not fall. It

is built upon a tussock; and a tussock — did you ever try to pull up a tussock?

Winter may descend, and boys and foxes may come — and they will come, but not before the walls are frozen. Then, let them come. The house will stand. It is boy-proof, almost; it is entirely rain-, cold-, and fox-proof. I have often seen where the fox has gone round and round the house in the snow, and where, at places, he has attempted to dig into the frozen mortar. But it was a foot thick, as hard as flint, and utterly impossible for his pick and shovel.

I said the floods, as well as the fox, may come. So they may, ordinarily; but along in March, when one comes as a freshet and rises to the dome of the house, then it fills the bed-chamber to the ceiling and drowns the dwellers out. I remember a freshet once in the end of February that flooded Lupton's Pond and drove the muskrats of the whole pond village to their ridgepoles, to the bushes, and to whatever wreckage the waters brought along.

> "The best-laid schemes o' mice and men
> Gang aft agley"

— and of muskrats, too.

But not very often do the muskrats' plans go thus agley. For muskrats and wood mice and birds and bees, and even the very trees of the forest, have a kind of natural foresight. They all look ahead, at the approach of autumn, and begin to provide against the

coming cold. Yet, weather-wise as a muskrat may be, still he cannot know all that may happen; he cannot be ready for everything. And so, if now and then, he should prove foresight to be vain, he only shows that his plans and our plans, his life and our lives, are very much alike.

Usually, however, the muskrat's plans work out as he would have them. His foresight proves to be equal to all that the winter can bring. On the coldest winter days I shall look out over the bleak white waste to where his house shows, a tiny mound in the snow, and think of him safe and warm inside, as safe and warm as I am, in my house, here on the hilltop.

Indeed, I think the muskrat will be the warmer; for my big house here on Mullein Hill is sometimes cold. And the wind! If only I could drive the winter wind away from the corners of the house! But the house down in the meadow has no corners. It has walls, mud walls, so thick and round that the shrieking wind sweeps past unheard by the dwellers within; and all unheeded the cold creeps over and over the low thatch, to crawl back and stiffen upon the meadow.

The doors of this meadow house swing wide open throughout the winter; for they are in the bottom of the house, beneath the water, where only the muskrat can enter. Just outside the doors, down under the water and the roof of ice that covers all

the flooded meadow, are fresh calamus roots, and iris and arum — food in abundance, no matter how long the winter lasts.

No, the winter has not yet come; but it is coming, for the muskrats are building. Let it come. Let the cold crawl stiff and gray across the meadow. Let the whirling snow curl like smoke about the pointed top of the little tepee down by the meadow ditch. Let the north wind do its worst. For what care the dwellers in that thick-walled lodge beneath the snow? Down under the water their doors are open; their roadways up the ditches as free as in the summer; and the stems of the sedges just as juicy and pink and tender.

The muskrats are building. The buds are leaving. Winter is coming. I must get out my own storm-windows and double-doors; for even now a fire is blazing cheerily on my wide, warm hearth.

CHAPTER IX

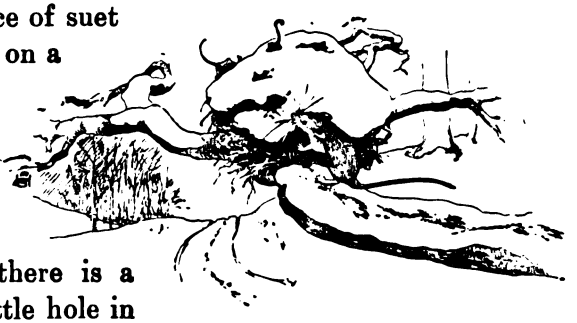
THE NORTH WIND DOTH BLOW

"The north wind doth blow,
And we shall have snow,
And what will poor Robin do then,
Poor thing?"

AND what will Muskrat do? and Chipmunk? and Whitefoot, the wood mouse? and Chickadee? and the whole world of poor things out of doors?

Never fear. Robin knows as well as you that the north wind doth blow, and is now far away on his journey to the South; Muskrat knows, too, and is building his warm winter lodge; Chipmunk has already made his bed deep down under the stone wall, where zero weather is unheard of; Whitefoot, the wood mouse, has stored his hollow poplar stub full of acorns, and, taking possession of Robin's deserted nest near by, has roofed it and lined it and turned it into a cosey, cold-proof house, while Chick-

adee, dear thing — has done nothing at all. Not so much as a bug or a single beetle's egg has he stored up for the winter. But he knows where there is a big piece of suet for him on a certain lilac bush. And he knows where there is a snug little hole in a certain elm tree limb. The north wind may blow, blow, blow! It cannot get through Chickadee's feathers, nor daunt for one moment his brave little heart.



The north wind sweeping the bare stubble fields and winding its shivering horn through the leafless trees does sometimes pierce my warm coat and strike a chill into my heart. Then how empty and cold seems the outdoor world! How deadly the touch of the winter! How fearful the prospect of the coming cold!

Does Muskrat think so? Does Whitefoot? Does Chickadee? Not at all, for they are ready.

The preparations for hard weather may be seen going on all through the autumn, beginning as far back as the flocking of the swallows late in July. Up to that time no one had thought of a coming winter, it would seem; but, one day, there upon the tele-

graph-wires were the swallows — the first sign that the getting ready for winter has begun.

The great migratory movements of the birds are very mysterious; but they were in the beginning, I think, and are still, for the most part, mere shifts to escape the cold. Yet not so much to escape the cold itself do the birds migrate, as to find a land of food. When the northland freezes, when river and lake are sealed beneath the ice and the soil is made hard as flint, then the food supplies for most of the birds are utterly cut off, causing them to move southward ahead of the cold, or starve.

There are, however, a few of the seed-eating birds, like the quail, and some of the insect-eaters, like the chickadee, who are so well provided for that they can stay and survive the winter. But the great majority of the birds, because they have no storehouse nor barn, must take wing and fly away from the lean and hungry cold.

And I am glad to see them go. The thrilling honk of the flying wild geese out of the November sky tells me that the hollow forests and closing bays of the vast desolate North are empty now, except for the few creatures that find food and shelter in the snow.

Here in my own small woods and marshes there is much getting ready, much comforting assurance that Nature is quite equal to herself, that winter is not approaching unawares. There will be great lack,

no doubt, before there is plenty again; there will be suffering and death. But what with the building, the strange deep sleeping, and the harvesting, there will be also much comfortable, much joyous and sociable, living.

Long before the muskrats began to build, even before the swallows commenced to flock, my chipmunks started their winter stores. I don't know which began his work first, which kept harder at it, Chipmunk or the provident ant. The ant has a great reputation for thrift, and verses have been written about her. But Chipmunk is just as thrifty. So is the busy bee.

It is the thought of approaching winter that keeps the bee busy far beyond her summer needs. Much of her labor is entirely for the winter. By the first of August she has filled the brood chamber of the hive with honey — forty pounds of it, enough for the hatching bees and for the whole colony until the willows tassel again. But who knows what the winter may be? how cold and long drawn out into the coming May? So the harvesting is pushed with vigor on, until the frosts kill the last of the autumn asters — on, until fifty, a hundred, or even three hundred pounds of honey are sealed in the combs, and the colony is safe should the sun not shine again for a year and a day.

The last of the asters have long since gone; so have the witch-hazels. All is quiet about the hives. The bees have formed into their warm winter clusters upon the combs; and except "when come the calm, mild days," they will fly no more until March or April. I will half close their entrances — and so help them to put on their storm-doors.

The whole out of doors around me is like a great beehive, stored and sealed for the winter, its swarming life close-clustered, and safe and warm against the coming cold.

I stand along the edge of the hillside here and look down the length of its frozen slope. There is no sign of life. The brown leaves have drifted into the mouths of the woodchuck holes, as if every burrow were forsaken; sand and sticks have washed in, too, littering and choking the doorways. A stranger would find it hard to believe that all of my forty-six woodchucks are gently snoring at the bottoms of these old uninteresting holes. Yet here they are, and quite out of danger, sleeping the sleep of the furry, the fat, and the forgetful.

The woodchuck's manner of providing for winter is very curious. Winter spreads far and fast, and Woodchuck, in order to keep ahead, out of danger, would need wings. But wings weren't given him. Must he perish then? Winter spreads far, but it does not go deep — down only about four feet; and Woodchuck, if he cannot escape overland, can,

perhaps, escape *under*land. So down he goes *through* the winter, down into a mild and even temperature, *five feet away* — only five feet, but as far away from the snow and the cold as Bobolink among the reeds of the distant Orinoco.

Indeed, Woodchuck's is a farther journey and even more wonderful than Bobolink's; for these five feet carry him to the very gates of death. That he will return with Bobolink, that he will come up alive with the spring out of this dark way, is passing strange.

Muskrat built him a house, and under the spreading ice turned all the meadow into a well-stocked cellar. Beaver built him a dam, cut and anchored under water a plenty of green sticks near his lodge, so that he too would be under cover when the ice formed, with an abundance of tender bark at hand. Chipmunk spent half of his summer laying up food near his underground nest. But Woodchuck simply digged him a hole, — a grave, — then ate until no particle more of fat could be got within his baggy hide, then crawled into his bed to sleep until the dawn of spring!

This is his shift! This is the length to which he goes, because he has no wings, and because he can-

not cut, cure, and store away, in the depths of the stony hillside, clover hay enough to last him through the winter. The beaver cans his fresh food in cold water; the chipmunk selects long-keeping things and buries them; but the woodchuck simply fattens himself, then buries himself, and sleeps — and lives!

"The north wind doth blow,
And we shall have snow,"

but what good reason is there for our being daunted at the prospect? Robin and all the others are well prepared. Even the wingless frog, who is also without fur or feathers or fat, even he has no fear at the sound of the cold winds. Nature provides for him, too, in her own motherly way. All he has to do is to dig into the mud at the bottom of the ditch and sleep — and sometimes freeze!

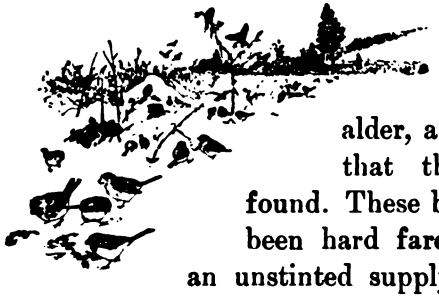
No matter. If the cold works down and freezes him into the mud, he never knows. He will thaw out as good as new; he will sing again for joy and love as soon as his heart warms up enough to beat. I have seen frogs frozen into the middle of solid lumps of ice. Drop the lump on the floor, and the frog would break out like a fragment of the ice itself. And this has happened more than once to the same frog without causing him the least ache or pain. He would gradually limber up, and croak, and look as wise as ever.

The north wind *may* blow, for it is by no means a cheerless prospect, this wood-and-meadow world of

mine in the gray November light. The grass-blades are wilting, the old leaves are falling; but no square foot of greensward will the winter kill, nor a single tree perhaps in all my wood-lot. There will be little less of life next April because of this winter. The winter birds will suffer most, and a few may die.

Last February, I came upon two partridges in the snow, dead of hunger and cold. It was after an extremely long "severe spell"; but this was not the only cause. These two birds since fall had been feeding regularly in the dried fodder corn that stood shocked over the field. One day all the corn was carted away. The birds found their supply of food suddenly cut off, and, unused to foraging the fence-rows and tangles for wild seeds, they seem to have given up the struggle at once, although within easy reach of plenty.

Hardly a minute's flight away was a great thicket of dwarf sumac covered with berries. There were



bayberries, rose-hips, greenbrier, bittersweet, black alder, and checkerberries that they might have found. These berries would have been hard fare, doubtless, after an unstinted supply of sweet corn; but still they were plentiful and would have been sufficient had the birds made use of them.

The smaller birds that stay through the winter,

like the tree sparrow and the junco, feed upon the weeds and grasses that ripen unmolested along the roadsides and in the waste places. A mixed flock of these small birds lived several days last winter upon the seeds of the ragweed in my mowing-field.

The weeds came up in the early fall after the field was sowed to clover and timothy. They threatened to choke out the grass. I looked at them and thought with dismay of how they would cover the field by another fall. After a time the snow came, a foot and a half of it, till only the tops of the seedy ragweeds showed above the level white. Then the juncos, goldfinches, and tree sparrows came; and there was a five-day shucking of ragweed seed on the crusty snow — five days of life and plenty for the birds.

Then I looked again, and thought that weeds and winters, which were made when the world was made — that even ragweeds and winters have a part in the beautiful divine scheme of things.

"The north wind doth blow
And we shall have snow" —

but the wild geese are going over; the wild mice have harvested their acorns; the bees have clustered; the woodchucks have gone to sleep; the muskrats have nearly finished their lodge; the sap in the big hickory tree by the side of the house has crept down out of reach of the fingers of the frost. And what has become of Robin, poor thing?

CHAPTER X

AN OUTDOOR LESSON

I HAVE had many a person ask me, "What is the best way to learn about the out of doors?" and I always answer, "Don't try to learn *about* it, but first go out of the house and get into the out of doors. Then open both eyes, use both of your ears, and stand in one place stock still as long as you can; and you will soon know the out of doors itself, which is better than knowing about it."

"But," says my learner, "if I go out of the house, I don't get into the out of doors at all, but into a city street!"

Look there — in the middle of the street! What is it? An English sparrow? Yes, an English sparrow — six English sparrows. Are they not a part of the out of doors? And look up there, over your head — a strip of sky? Yes — is not a strip of blue sky a part of the out of doors?

Now let me tell you how I learned an outdoor lesson one night along a crowded city street.

It was a cold, wet night; and the thick, foggy twilight, settling down into the narrow streets, was full of smoke and smell and chill. A raw wind blew in from the sea and sent a shiver past every corner.

The street lights blinked, the street mud glistened, the street noises clashed and rattled, and the street crowds poured up and down and bore me along with them.

I was homesick — homesick for the country. I longed to hear the sound of the wind in the pine trees; I longed to hear the single far-away bark of the dog on the neighboring farm, or the bang of a barn-door, or the clack of a guinea going to roost. It was half-past five, and thousands of clerks were pouring from the closing stores; but I was lonely, homesick for the quiet, the wideness, the trees and sky of the country.

Feeling thus, and seeing only the strange faces all about me, and the steep narrow walls of the street high above me, I drifted along, until suddenly I caught the sound of bird voices shrill and sharp through the din.

I stopped, but was instantly jostled out of the street, up against a grim iron fence, to find myself peering through the pickets into an ancient cemetery in the very heart of Boston.

As I looked, there loomed up in the fog and rain overhead the outlines of three or four gaunt trees, whose limbs were as thick with sparrows as they had ever been with leaves. A sparrow roost! Birds, ten thousand birds, gone to roost in the business section of a great city, with ten thousand human beings passing under them as they slept!

I got in behind a big waste-barrel by the iron fence and let the crowd surge past. It was such a sight as I had never seen. I had seen thousands of chimney swallows go to roost in the deserted chimneys of a great country house; I had many a time gone down at night to the great crow-roost in the pines at Cubby Hollow; but I had never stumbled upon a bird-roost on a crowded city street before!

The hurrying throng behind me thinned and straggled while I waited, watching by the iron fence. The wind freshened, the mist thickened into fine rain that came slanting down through the half-lighted trees; the sleeping sparrows twittered and shifted uneasily on the limbs.

The streets were being deserted. It was going to be a wild night on the water, and a wild night in the swaying, creaking tops of these old elm trees. I shivered at the thought of the sparrows sleeping out in such a night as this, and turned away toward my own snug roost hardly two blocks away.

The night grew wilder. The wind rattled down our street past a hundred loose shutters; the rain slapped against the windows, and then stopped as a heavy gust curled over the line of roofs opposite. I thought of the sparrows. Had they been driven from the tossing limbs? Could they cling fast in such a wind, and could they sleep?

Going to the window I looked down into the street. Only the electric light at the corner showed

through the blur of the storm. The street was empty.

I slipped into my coat and went out; not even a policeman was in sight. Only the whirling sheets of rain, only the wild sounds of the wind were with me. The lights flared, but only to fill the streets with fantastic shadows and to open up a yawning cavern in every deep, dark doorway.

Keeping in the lee of the shuttered buildings, I made my way to the sparrow roost. I shall never forget the sight! Not a sparrow had left his perch, but every bird had now turned, facing the wind—breasting the wind, I should say; for every head was under a wing, as near as I could make out, and every breast was toward the storm. Here, on the limbs, as close as beads on a string, they clung and rocked in the arms of the wind, every one with his feathers tight to his body, his tail lying out flat on the storm.

Now there is the outdoor lesson I learned, and that is how I learned it. And what was the lesson? Why, this: that you are not shut away from Nature even in the heart of a great city; that the out of doors lies very close about you, as you hurry down a crowded city street.

CHAPTER XI

LEAFING

O, you never went "leafing" — not unless you are simon-pure country-bred. You do not know what the word means. You cannot find it in the unabridged dictionary — not in the sense in which I am using it. But there are many good words we country people use that are not, perhaps, in the dictionary.

And what do I mean by "leafing"? Get down that bundle of meal sacks, hitch into the one-horse hay-rig, throw in the rakes, and come. We are going into the woods for pig-bedding, for leaves to keep the pigs dry and warm this winter!

You never went after leaves for the pigs? Perhaps you never even had a pig. But a pig is worth having, if only to see the comfort he takes in the big bed of dry leaves you give him in the sunny corner of his pen. And if leafing had no other reward, the thought of the snoozing, snoring pig buried to his winking snout in the bed, would give joy and zest enough to the labor.

But leafing, like every other humble labor, has its

own rewards, not the least of them being the leaves themselves and the getting of them!

We jolt across the bumpy field, strike into the back wood-road, and turn off upon an old stumpy track over which cord wood was carted years ago. Here in the hollow at the foot of a high wooded hill, the winds have whirled the oak and maple leaves into drifts almost knee-deep.

We are off the main road, far into the heart of the woods. We straddle stumps; bend down saplings; stop while the horse takes a bite of sweet birch; tack and tip and tumble and back through the tight squeezes between the trees; and finally, after a prodigious amount of whoa-ing and oh-ing and squealing and screeching, we land right side up and so headed that we can start the load out toward the open road.

You can yell all you want to when you go leafing; yell at every stump you hit; yell every time a limb knocks off your hat or catches you under the chin; yell when the horse stops suddenly to browse on the twigs and stands you meekly on your head in the bottom of the rig. You can screech and howl and yell like the wild Indian that you are, you can dive and wrestle in the piles of leaves and cut all the crazy capers you know; for this is a Saturday, these are the wild woods and the noisy leaves, and who is there looking on besides the mocking jays and the crows?

The leaves pile up. The wind blows keen among the tall, naked trees; the dull cloud hangs low above the ridge; and through the cold gray of the maple swamp below you, peers the face of Winter.

You start up the ridge with your rake and draw down another pile, thinking, as you work, of the pig. The thought is pleasing. The warm glow all over your body strikes into your heart. You rake away as if it were your own bed you were gathering — as really it is. He that rakes for his pig, rakes also for himself. A merciful man is merciful to his beast; and he that gathers leaves for his pig spreads a blanket of down over his own winter bed.

Is it to warm my feet on winter nights that I pull on my boots at ten o'clock and go my round at the barn? Yet it warms my feet through and through to look into the stalls and see the cow chewing her cud, and the horse cleaning up his supper hay, standing to his fetlocks in his golden bed of new rye-straw; and then, going to the pig's pen, to hear him snoring louder than the north wind, somewhere in the depths of his leaf-bed, far out of sight. It warms my heart, too!

So the leaves pile up. How good a thing it is to have a pig to work for! What zest and purpose it lends to one's raking and piling and storing! If I could get nothing else to spend myself on, I should surely get me a pig. Then, when I went to walk in the woods, I should be obliged, occasionally, to carry

a rake and a bag with me — much better things to take into the woods than empty hands, and sure to scratch into light a number of objects that would never come within the range of opera-glass or gun or walking stick. To see things through a twenty-four-toothed rake is to see them very close, as through a microscope magnifying twenty-four diameters.

And so, as the leaves pile up, we keep a sharp lookout for what the rake uncovers — here, under a rotten stump, a hatful of acorns, probably gathered by the white-footed wood mouse. For the stump gives at the touch of the rake, and a light kick topples it down the hill, spilling out a big nest of feathers and three dainty little creatures that scurry into the leaf-piles like streaks of daylight. They are the white-footed wood mice, long-tailed, big-eared, and as clean and high-bred looking as greyhounds.

Combing down the steep hillside with our rakes, we dislodge a large stone, exposing a black patch of fibrous roots and leaf mould, in which something moves and disappears. Scooping up a double handful of the mould, we capture a little red-backed salamander.

This is not the "red" salamander that Mr. Burroughs tells us is "the author of that fine plaintive piping to be heard more or less frequently, according to the weather, in our summer and autumn woods." His "red" salamander is really a "dull orange,

variegated with minute specks or spots," a species I have never found here in my New England woods.

Nor have I ever suspected my red-backed salamander of piping; though he may do it, as may the angleworms, for aught I am able to hear, so filled with whir of iron wheels are my dull ears. But listen! Something piping! Above the rustle of the leaves we also hear a "fine plaintive" sound — no, a shrill and ringing little racket, rather, about the bigness of a penny whistle.

Dropping the rake, we cautiously follow up the call — it seems to speak out of every tree trunk — and find the piper clinging to a twig, no salamander at all, but a tiny tree-frog, Pickering's hyla, his little bagpipe blown almost to bursting as he tries to rally the scattered summer by his tiny, mighty "skirl." Take him nose and toes, he is surely as much as an inch long, not very large to pipe against the north wind turned loose in the leafless woods.

We go back to our raking. Above us, among the stones of the slope, hang bunches of Christmas fern; around the foot of the trees we uncover trailing clusters of gray-green partridge vine, glowing with crimson berries; we rake up the prince's pine, pipsissewa, creeping jennie, and wintergreen red with ripe berries, — a whole bouquet of evergreens, — exquisite, fairy-like forms, that later shall gladden our Christmas table.

"BUT COME, BOYS, GET AFTER THOSE BAGS!"

But how they gladden and cheer the October woods! Summer dead? Hope all gone? Life vanished away? See here, under this big pine, a whole garden of arbutus, green and budded, almost ready to bloom! The snows shall come before their sweet eyes open; but open they will at the very first touch of spring. We will gather a few, and let them wake up in saucers of clean water in our sunny south windows.

Leaves for the pig, and arbutus for us! We make a clean sweep down the hillside, "jumping" a rabbit from its form, or bed, under a brush-pile; discovering where a partridge roosts in a low-spreading hemlock; coming upon a snail cemetery, in a hollow hickory stump; turning up a yellow-jacket's nest, built two-thirds underground; tracing the tunnel of a bob-tailed mouse in its purposeless windings in the leaf mould; digging into a woodchuck's—

"But come, boys, get after those bags! It is leaves in the hay-rig that we want, not woodchucks at the bottom of woodchuck holes." Two small boys catch up a bag and hold it open, while the third boy stuffs in the crackling leaves. Then I come along with my big feet and pack the leaves in tight, and onto the rig goes the bulging thing!

Exciting? If you can't believe it exciting, hop up on the load and let us jog you home. Swish! bang! thump! tip! turn! joggle! jolt!—Hold on to your ribs! Look out for the stump! Is n't it fun to go leaf-

[illegible] anything that your heart does [illegible] like a pig?

[illegible] we shake out the bags of [illegible] shake himself and curl his tail. That curl is his laugh. We [illegible] and very often we laugh hard: but the pig can't laugh, and he can't double himself up, so he [illegible] his tail. There is where his laugh comes out, curling and kinking in little spasms of pure pig joy!

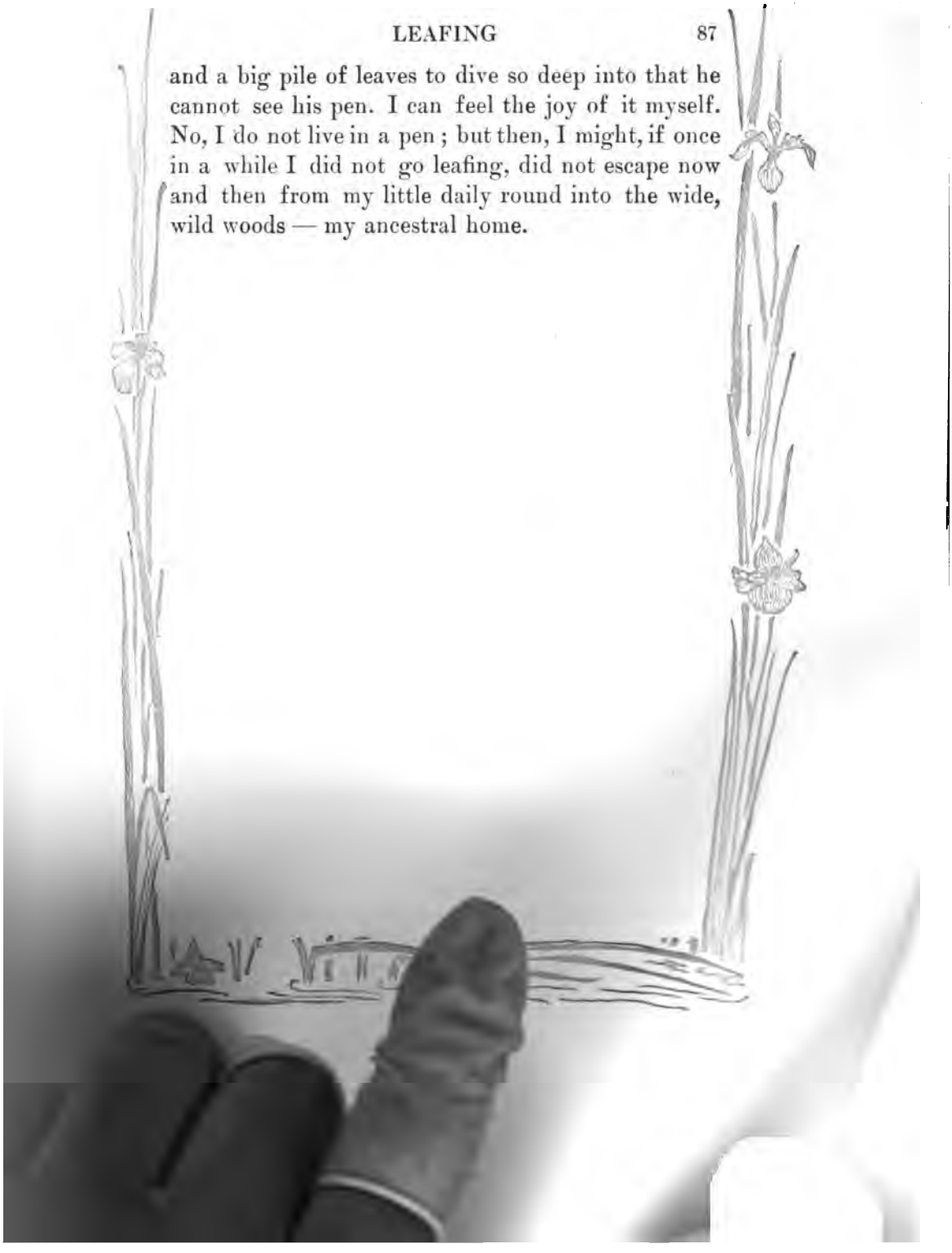
Boosh! Boosh! he snorts, and darts around the pen like a whirlwind, scattering the leaves in forty ways, to stop short — the shortest stop! — and fall to *rooting* for acorns.

He was once a long-tusked boar of the forest, — this snow-white, sawed-off, pug-faced little porker of mine — ages and ages ago. But he still remembers the smell of the forest leaves; he still knows the taste of the acorn-mast; he is still wild pig in his soul.

And we were once long-haired, strong-limbed savages who roamed the forest hunting him — ages and ages ago. And we, too, like him, remember the smell of the fallen leaves, and the taste of the forest fruits and of pig, *roast* pig! And if the pig in his heart is still a wild boar, no less are we, at times, wild savages in our hearts.

Anyhow, for one day in the fall I want to go "boating." I want to give my pig a taste of acorns,

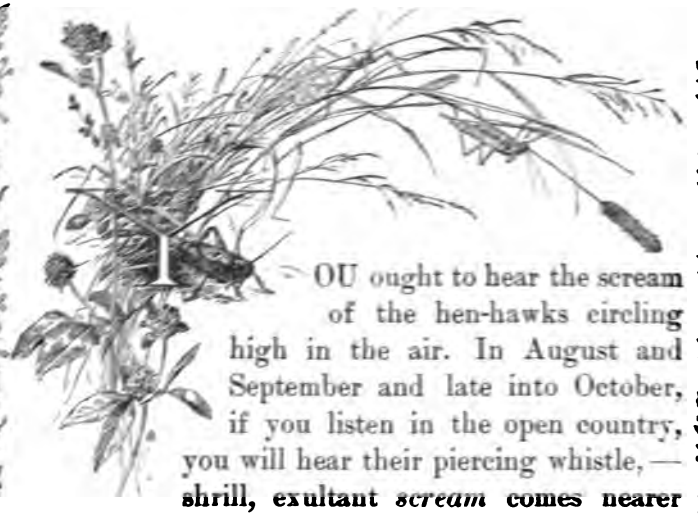
and a big pile of leaves to dive so deep into that he cannot see his pen. I can feel the joy of it myself. No, I do not live in a pen; but then, I might, if once in a while I did not go leafing, did not escape now and then from my little daily round into the wide, wild woods — my ancestral home.



CHAPTER XII

A CHAPTER OF THINGS TO HEAR THIS FALL

I



YOU ought to hear the scream of the hen-hawks circling high in the air. In August and September and late into October, if you listen in the open country, you will hear their piercing whistle, — shrill, exultant *scream* comes nearer to describing it, — as they sail and sail a mile away in the sky.

II

You ought to go out upon some mowing hill or field of stubble and hear the crickets, then into the apple orchard and hear the katydids, then into the high grass and bushes along the fence and hear the whole stringed chorus of green grasshoppers, katy-

dids, and crickets. You have heard them all your life; but the trouble is that, because you have heard them so constantly in the autumn, and because one player after another has come gradually into the orchestra, you have taken them as part of the natural course of things and have never really heard them individually, to know what parts they play. Now anybody can hear a lion roar, or a mule bray, or a loon laugh his wild crazy laugh over a silent mountain lake, and know what sound it is; but who can hear a cricket out of doors, or a grasshopper, and know which is which?

III

Did you ever hear a loon laugh? You ought to. I would go a hundred miles to hear that weird, meaningless, melancholy, maniacal laughter of the loon, or great northern diver, as the dusk comes down over some lonely lake in the wilderness of the far North. From Maine westward to northern Illinois you may listen for him in early autumn; then, when the migration begins, anywhere south to the Gulf of Mexico. You may never hear the call of the bull moose in the northern woods, nor the howl of a coyote on the western praires, nor the wild *cac, cac, cac*

of the soaring eagles, nor the husky *yap, yap, yap* of the fox. But, if you do, "make a note of it," as Captain Cuttle would say; for the tongues that utter this wild language are fast ceasing to speak to us.

IV

One strangely sweet, strangely wild voice that you still may hear in our old apple orchards, is the whimpering, whinnying voice of the little screech owl. "When night comes," says the bird book, "one may hear the screech owl's tremulous, wailing whistle. It is a weird, melancholy call, welcomed only by those who love Nature's voice, whatever be the medium through which she speaks." Now listen this autumn for the screech owl; listen until the weird, melancholy call *is* welcomed by you, until the shiver that creeps up your back turns off through your hair, as you hear the low plaintive voice speaking to you out of the hollow darkness, out of the softness and the silence of night.

V

You ought to hear the brown leaves rustling under your feet.

"Heaped in the hollows of the grove, the autumn leaves lie dead;
They rustle to the eddying gust, and to the rabbit's tread."

And they should rustle to your tread as well. Scuff along in them where they lie in deep windrows by the side of the road; and hear them also, as the wind gathers them into a whirling flurry and sends them rattling over the fields.

VI

You ought to hear the cry of the blue jay and the caw of the crow in the autumn woods.

"The robin and the wren are flown, but from the shrub the jay,
And from the wood-top calls the crow through all the gloomy day."

Everybody knows those lines of Bryant, because everybody has heard that loud scream of the jay in the lonesome woods, and the *caw, caw, caw* of the sentinel crow from the top of some tall tree. The robins may not be all gone, for I heard and saw a flock of them this year in January; but they are silent now, and so many of the birds have gone, and the woods have become so empty, that the cries of the jay and the crow seem, on a gloomy day, to be the only sounds in all the hollow woods. There could hardly be an autumn for me if I did not hear these two voices speaking — the one with a kind of warning in its shrill, half-plaintive cry; the other with a

message slow and solemn, like the color of its sable coat.

VII

You ought to hear, you ought to *catch*, I should say, a good round scolding from the red squirrel this fall. A red squirrel is always ready to scold you (and doubtless you are always in need of his scolding), but he is never so breathless and emphatic as in the fall. "Whose nuts are these in the woods?" he asks, as you come up with your stick and bag. "Who found this tree first? Come, get out of here! Get right back to the city and eat peanuts! Come, do you hear? Get out of this!"

No, don't be afraid; he won't "eat you alive"—though I think he might if he were big enough. He won't blow up, either, and burst! He is the kind of fire-cracker that you call a "sizzler"—all sputter and no explosion. But is n't he a tempest! Is n't he a whirlwind! Is n't he a red-coated cyclone! Let him blow! The little scamp, he steals birds' eggs in the summer, they say; but there are none now for him to steal, and the woods are very empty. We need a dash of him on these autumn days, as we need a dash of spice in our food.

In the far western mountains he has a cousin called the Douglas squirrel; and Mr. John Muir calls him "the brightest of all the squirrels I have ever seen, a hot spark of life, making every tree tingle with his prickly toes, a condensed nugget of fresh mountain vigor and valor, as free from disease as a sunbeam. How he scolds, and what faces he makes, all eyes, teeth, and whiskers!"

You must hear him this fall and take your scolding, whether you deserve it or not.

VIII

You ought to hear in the cedars, pines, or spruces the small thin *cheep, cheep, cheep* of the chickadees or the kinglets. You must take a quiet day on the very edge of winter and, in some sunny dip or glade, hear them as they feed and flit about you. They speak in a language different from that of the crow and the jay. This tiny talk of the kinglet is all friendly and cheerful and personal and confidential, as if you were one of the party and liked spiders' eggs and sunshine and didn't care a snap for the coming winter! In all the vast gray out of doors what bits of winged bravery, what crumbs of feathered courage, they seem! One is

hardly ready for the winter until he has heard them in the cedars and has been assured that they will stay, no matter how it snows and blows.

IX

You ought to hear, some quiet day or moonlit night in October or November, the baying of the hounds as they course the swamps and meadows on the heels of the fox. Strange advice, you say? No, not strange. It is a wild, fierce cry that your fathers heard, and their fathers, and theirs — away on back to the cave days, when life was hardly anything but the hunt, and the dogs were the only tame animal, and the most useful possession, man had. Their deep bass voices have echoed through all the wild forests of our past, and stir within us nowadays wild memories that are good for us again to feel. Stand still, as the baying pack comes bringing the quarry through the forest toward you. The blood will leap in your veins, as the ringing cries lift and fall in the chorus that echoes back from every hollow and hill around; and you will on with the panting pack — will on in the fierce, wild exultation of the chase; for instinctively we are hunters, just as all our ancestors were.

No, don't be afraid. You won't catch the fox.

X

You ought to hear by day — or better, by night — the call of the migrating birds as they pass over,

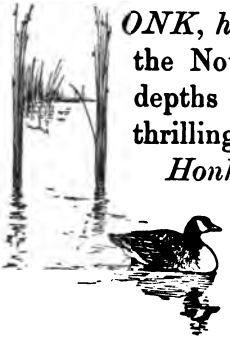
through the sky, on their way to the South. East or west, on the Alantic or on the Pacific shore, or in the vast valley of the Mississippi, you may hear at night, so high in air that you cannot see the birds, these voices of the passing migrants. *Chink, chink, chink!* will drop the calls of the bobolinks — fine, metallic, starry notes; *honk, honk, honk!* the clarion cry of the wild geese will ring along the aërial way, as they shout to one another and to you, listening far below them on the steadfast earth.

Far away, yonder in the starry vault, far beyond the reach of human eyes, a multitude of feathered folk, myriads of them, are streaming over; armies of them winging down the long highway of the sky from the frozen North, down to the rice fields of the Carolinas, down to the deep tangled jungles of the Amazon, down beyond the cold, cruel reach of winter.

Listen as they hail you from the sky.

CHAPTER XIII

HONK, HONK, HONK!



ONK, honk, honk! Out of the silence of the November night, down through the depths of the darkened sky, rang the thrilling call of the passing geese.

Honk, honk, honk! I was out of bed in an instant; but before I had touched the floor, there was a patter of feet in the boys' room, the creak of windows going up, and — silence.

Honk, honk, honk! A mighty flock was coming. The stars shone clear in the far blue; the trees stood dark on the rim of the North; and somewhere between the trees and the stars, somewhere along a pathway running north and south, close up against the distant sky, the wild geese were winging.

Honk, honk, honk! They were overhead. Clear as bugles, round and mellow as falling flute notes, ordered as the tramp of soldiers, fell the *honk, honk, honk,* as the flock in single line, or double like the letter V, swept over and was gone.

We had not seen them. Out of a sound sleep they had summoned us, out of beds with four wooden

legs and no wings; and we had heard the wild sky-call, had heard and followed through our open windows, through the dark of the night, up into the blue vault under the light of the stars.

Round and dim swung the earth below us, hushed and asleep in the soft arms of the night. Hill and valley lay close together, farm-land and wood-land, all wrapped in the coverlet of the dark. City and town, like watch fires along the edge of a sleeping camp, burned bright on the rivers and brighter still on the ragged line of shore and sea, for we were far away near the stars. The mountains rose up, but they could not reach us; the white lakes beckoned, but they could not call us down. For the stars were bright, the sky-coast was clear, the wind in our wings was the keen, wild wind of the North, and the call that we heard — ah! who knows the call? Yet, who does not know it — that distant haunting call to fly, fly, fly?

I found myself in my bed the next morning. I found the small boys in their beds. I found the big round sun in the sky that morning and not a star in sight! There was nothing unusual to be seen up there, nothing mysterious at all. But there was something unusual, something mysterious to be seen in the four small faces at the breakfast-table that morning — eyes all full of stars and deep with the far, dark depths of the midnight sky into which they had gazed — into which those four small boys had flown!

We had often heard the geese go over before, but never such a flock as this, never such wild waking clangor, so clear, so far away, so measured, swift, and — gone!

I love the sound of the ocean surf, the roar of a winter gale in the leafless woods, the sough of the moss-hung cypress in the dark southern swamps. But no other voice of Nature is so strangely, deeply thrilling to me as the *honk, honk, honk* of the passing geese.

For what other voice, heard nowadays, of beast or bird is so wild and free and far-resounding? Heard in the solemn silence of the night, the notes fall as from the stars, a faint and far-off salutation, like the call of sentinels down the picket line — "All's well! All's well!" Heard in the open day, when you can see the winged wedge splitting through the dull gray sky, the notes seem to cleave the dun clouds, driven down by the powerful wing-beats where the travelers are passing high and far beyond the reach of our guns.

The sight of the geese going over in the day, and the sound of their trumpetings, turn the whole world of cloud and sky into a wilderness, as wild and primeval a wilderness as that distant forest of the far Northwest where the howl of wolves is still heard by the trappers. Even that wilderness, however, is passing; and perhaps no one of us will ever hear the howl of wolves in the hollow snow-filled forests, as

many of our parents have heard. But the *honk* of the wild geese going over we should all hear, and our children should hear; for this flock of wild creatures we have in our hands to preserve.

The wild geese breed in the low, wet marshes of the half-frozen North, where, for a thousand years to come they will not interfere with the needs of man. They pass over our northern and middle states and spend the winter in the rivers, marshes, and lagoons of the South, where, for another thousand years to come, they can do little, if any, harm to man, but rather good.

But North and South, and all along their journey back and forth, they are shot for sport and food. For the wild geese cannot make this thousand-mile flight without coming down to rest and eat; and wherever that descent is made, there is pretty sure to be a man with a gun on the watch.

Here, close to my home, are four ponds; and around the sides of each of them are "goose blinds" — screens made of cedar and pine boughs fixed into the shore, behind which the gunners lie in wait. More than that, out upon the surface of the pond are geese swimming, but tied so that they cannot escape — geese that have been raised in captivity and placed there to lure the flying wild flocks down. Others, known as "flyers," are kept within the blind to be let loose when a big flock is seen approaching — to fly out and mingle with them and decoy them

to the pond. These "flyers" are usually young birds and, when thrown out upon their wings, naturally come back, bringing the wild flock with them, to their fellows fastened in the pond.

A weary flock comes winging over, hungry, and looking for a place to rest. Instantly the captive geese out on the pond see them and set up a loud honking. The flying flock hear them and begin to descend. Then they see one (tossed from the blind) coming on to meet them, and they circle lower to the pond, only to fall before a fury of shots that pour from behind the blind.

Those of the flock that are not killed rise frightened and bewildered to fly to the opposite shore, where other guns riddle them, the whole flock sometimes perishing within the ring of fire!

Such shooting is a crime because it is unfair, giving the creature no chance to exercise his native wit and caution. The fun of hunting, as of any sport, is in playing the game — the danger, the exercise, the pitting of limb against limb, wit against wit, patience against patience; not in a heap of carcasses, the dead and bloody weight of mere meat!

If the hunter would only play fair with the wild goose, shoot him (the wild Canada goose) only along the North Carolina coast, where he passes the winter, then there would be no danger of the noble bird's becoming extinct. And the hunter then would know what real sport is, and what a long-headed, far-

sighted goose the wild goose really is — for there are few birds with his cunning and alertness.

Along the Carolina shore the geese congregate in vast numbers; and when the day is calm, they ride out into the ocean after feeding, so far off shore that no hunter could approach them. At night they come in for shelter across the bars, sailing into the safety of the inlets and bays for a place to sleep. If the wind rises, and a storm blows up, then they must remain in the pools and water-holes, where the hunter has a chance to take them. Only here, where the odds, never even, are not all against the birds, should the wild geese be hunted.

With the coming of March there is a new note in the clamor of the flocks, a new restlessness in their movements; and, before the month is gone, many mated pairs of the birds have flocked together and are off on their far northern journey to the icy lakes of Newfoundland and the wild, bleak marshes of Labrador.

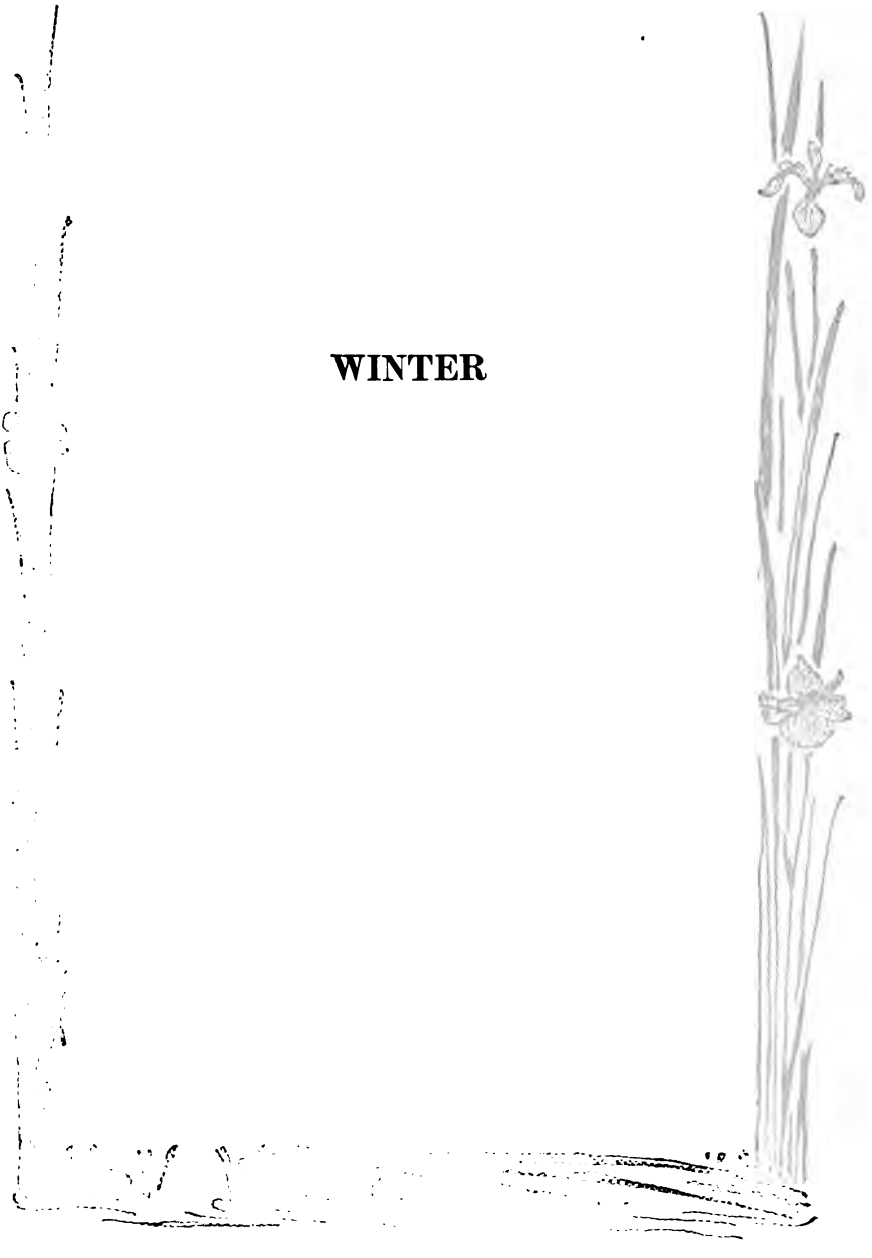
Honk, honk, honk! Shall I hear them going over, — going northward, — as I have heard them going southward this fall? Winter comes down in their wake. There is the clang of the cold in their trumpeting, the closing of iron gates, the bolting of iron doors for the long boreal night. They pass and leave the forests empty, the meadows brown and sodden, the rivers silent, the bays and lakes close sealed. Spring will come up with them on their return; and

their *honk, honk, honk* will waken the frogs from their oozy slumbers and stir every winter sleeper to the very circle of the Pole.

Honk, honk, honk! Oh, may I be awake to hear you, ye strong-winged travelers on the sky, when ye go over northward, calling the sleeping earth to waken, calling all the South to follow you through the broken ice-gates of the North!

Honk, honk, honk! The wild geese are passing —southward!

WINTER



THE FOX SPARROWS' BATH (page 56)

WINTER

CHAPTER I

HUNTING THE SNOW

YOU want no gun, no club, no game-bag, no steel trap, no snare when you go hunting the snow. Rubber boots or overshoes, a good, stout stick to help you up the ridges, a pair of field-glasses and a keen eye, are all you need for this hunt,— besides, of course, the snow and the open country.

You have shoveled the first snow of the winter; you have been snowballing in it; you have coasted on it; and gone sleigh-riding over it; but unless you have gone hunting over it you have missed the rarest, best sport that the first snowfall can bring you.

Of all the days to be out in the woods, the day that follows the first snowfall is — the best? No, not the best. For there is the day in April when you go after arbutus; and there is the day in June when the turtles come out to lay in the sand; the muggy, cloudy day in August when the perch are hungry for you in the creek; the hazy Indian Sum-

mer day when the chestnuts are dropping for you in the pastures; the keen, crisp February day when the ice spreads glassy-clear and smooth for you over the mill-pond; the muddy, raw, half-thawed, half-lighted, half-drowned March day when the pussy-willows are breaking, and the first spring frogs are piping to you from the meadow. Then there is — every day, every one of the three hundred and sixty-five days, each of them best days to be out in the live world of the fields and woods.

But *one* of the very best days to be out in the woods is the day that follows the first winter snow-fall, for that is the day when you must shoulder a good stout stick and go gunning. Gunning with a stick? Yes, with a stick, and rubber boots, and bird-glasses. Along with this outfit you might take a small jointed foot-rule with which to measure your quarry, and a notebook to carry the game home in.

It ought to be the day after the first real snow, but not if that snow happens to be a blizzard and lies deep in dry powdery drifts, for then you could hardly follow a trail if you should find one. Do not try the hunt, either, if the snow comes heavy and wet; for then the animals will stay in their dens until the snow melts, knowing, as they do, that the soft slushy stuff will soon disappear. The snow you need will lie even and smooth, an inch or two deep, and will be just damp enough to pack into tight snow-balls.

If, however, the early snows are not ideal, then wait until over an old crusted snow there falls a fresh layer about an inch deep. This may prove even better hunting, for by this time in the winter the animals and birds are quite used to snow-walking, and besides, their stores of food are now running short, compelling them to venture forth whether or not they wish to go.

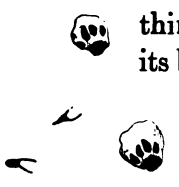
It was early in December that our first hunting-snow came last year. We were ready for it, waiting for it, and when the winter sun broke over the ridge, we started the hunt at the hen-yard gate, where we

saw tracks in the thin, new snow that led us up the ridge, and along its narrow back, to a hollow stump. Here the hunt began in earnest; for not until that trail of close, double, nail-pointed prints went under the stump were the four small boys convinced that we were tracking a skunk and not a cat.

The creature had moved leisurely — that you could tell by the closeness of the prints. Wide-apart tracks

in the snow mean hurry. Now a cat, going as slowly as this creature went, would have put down her dainty feet almost in a single line, and would have left round, cushion-marked holes in the snow, not triangular, nail-pointed prints like these. Cats do not venture into holes under stumps, either.

We had bagged our first quarry! No, no! We had not pulled that wood pussy out of his hole and put him into our game-bag. We did not want to do that. We really carried no bag; and if we had, we should not have put the wood pussy into it, for we were hunting tracks, not animals, and "bagging our quarry" meant trailing a creature to its den, or following its track till we had discovered something it had done, or what its business was, and why it was out. We were on the snow for animal *facts*, not pelts.



We were elated with our luck, for this stump was not five minutes by the ridge path from the hen-yard. And here, stand-

ing on the stump, we were only sixty minutes away from Boston Common by the automobile, driving no faster than the law allows. So we were hunting, not in a wilderness, but just outside our dooryard and almost within the borders of a great city.

And that is the first interesting fact of our morning hunt. No one but a lover of the woods and a careful walker on the snow would believe that here in the midst of hayfields, in sight of the smoke of city factories, so many of the original wild wood-folk still live and travel their night paths undisturbed.

Still, this is a rather rough bit of country, broken, ledgy, boulder-strewn, with swamps and woody hills that alternate with small towns and cultivated fields for many miles around.

Here the animals are still at home, as this hole of the skunk's under the stump proved. But there was more proof. As we topped the ridge on the trail of the skunk, we crossed another trail, made up of bunches of four prints, — two long and broad, two small and roundish, — spaced about a yard apart.

A hundred times, the winter before, we had tried that trail in the hope of finding the form or the burrow of its maker; but it crossed and turned and doubled, and always led us into a tangle, out of which we never got a clue. It was the track of the great northern hare, as we knew, and we were relieved to see the strong prints of our cunning neighbor again; for, what with the foxes and the hunters, we were

afraid it might have fared ill with him. But here he was, with four good legs under him; and, after bagging our skunk, we returned to pick up the hare's trail, to try our luck once more.

We followed his long, leisurely leaps down the ridge, out into our mowing-field, and over to the birches below the house. Here he had capered about in the snow, had stood up on his haunches and gnawed the bark from off a green oak sucker two and a half feet from the ground. This, doubtless, was pretty near his length, stretched out — an interesting item; not exact to the inch, perhaps, but close enough for us; for who would care to kill him in order to measure him with scientific accuracy?

Nor was this all; for up the footpath through the birches came the marks of two dogs. They joined the marks of the hare. And then, back along the edge of the woods to the bushy ridge, we saw a pretty race.

It was all in our imaginations, all done for us by those long-flinging footprints in the snow. But we

saw it all — the white hare, the yelling hounds, nip and tuck, in a burst of speed across the open field which must have left a gap in the wind behind.

It had all come as a surprise. The hounds had climbed the hill on the scent of a fox, and had started the hare unexpectedly. Off he had gone with a jump. But just such a jump of fear is what a hare's magnificent legs were intended for.

Those legs carried him a clear twelve feet in some of the longest leaps for the ridge; and they carried him to safety, so far as we could read the snow. In the medley of hare-and-hound tracks on the ridge there was no sign of a tragedy. He had escaped again — but how and where we have still to learn.

We had bagged our hare, — yet we have him still to bag, — and taking up the trail of one of the dogs, we continued our hunt. One of the joys of this snow-hunting is having a definite road or trail blazed for you by knowing, purposeful wild-animal feet.

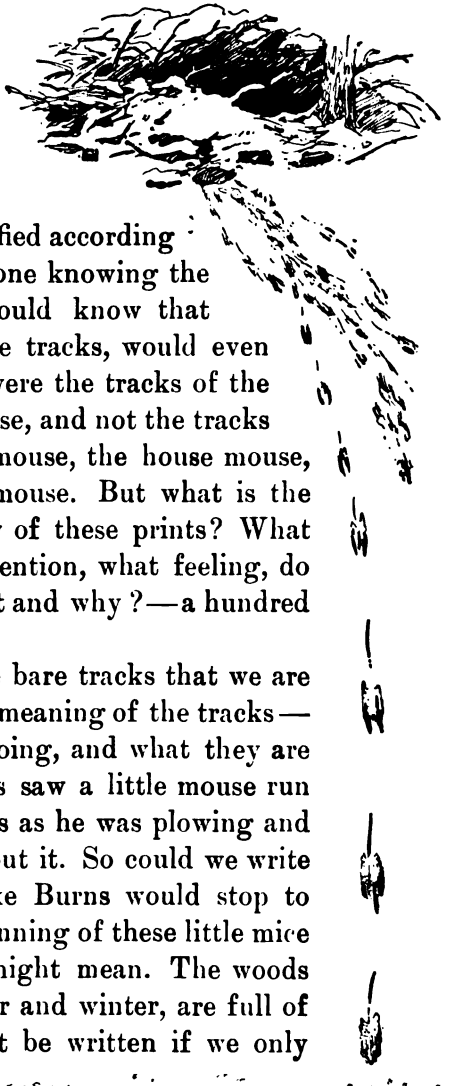
You do not have to blunder ahead, breaking your way into this wilderness world, trusting luck to bring you somewhere. The wild animal or the dog goes this way, and not that,

for a reason. You are watching that reason all along; you are pack-fellow to the hound; you hunt with him.

Here the hound had thrust his muzzle into a snow-capped pile of slashings, had gone clear round the pile, then continued on his way. But we stopped; for out of the pile, in a single, direct line, ran a number of mouse prints, going and coming. A dozen white-footed mice might have traveled that road since the day before, when the snow had ceased falling.

We entered the tiny road, for in this kind of hunting a mouse is as good as a mink, and found ourselves descending the woods toward the garden patch below. Halfway down we came to a great red oak, into a hole at the base of which, as into the portal of some mighty castle, ran the road of the mice. That was the end of it. There was not a single straying footprint beyond the tree.

I reached in as far as my arm would go, and drew out a fistful of pop-corn cobs. So here was part of my scanty crop! I pushed in again, and gathered up a bunch of chestnut shells, hickory-nuts and several neatly rifled hazelnuts. This was story enough. There must be a family of mice living under the slashing pile, who for some good reason kept their stores here in the recesses of this ancient red oak. Or was this some squirrel's barn being pilfered by the mice, as my barn is the year round? It was not all plain. But this question, this constant riddle of the woods, is part of our constant joy in the



woods. Life is always new, and always strange, and always fascinating.

It has all been studied and classified according to species. Any one knowing the woods at all, would know that these were mouse tracks, would even know that they were the tracks of the white-footed mouse, and not the tracks of the jumping mouse, the house mouse, or the meadow mouse. But what is the whole small story of these prints? What purpose, what intention, what feeling, do they spell? What and why?—a hundred times!

So it is not the bare tracks that we are hunting; it is the meaning of the tracks—where they are going, and what they are going for. Burns saw a little mouse run across the furrows as he was plowing and wrote a poem about it. So could we write a poem if we like Burns would stop to think what the running of these little mice across the snow might mean. The woods and fields, summer and winter, are full of poems that might be written if we only

knew just all that the tiny snow-prints of a wood mouse mean, or understood just what, "root and all, and all in all," the humblest flower is.

The pop-corn cobs, however, we did understand; they told a plain story; and, falling in with a gray squirrel's track not far from the red oak, we went on, our burdenless game-bag heavier, our hearts lighter that we, by the sweat of our brows, had contributed a few ears of corn to the comfort of this snowy winter world.

The squirrel's track wound up and down the hillside, wove in and out and round and round, hitting every possible tree, as if the only road for a squirrel was one that looped and doubled, and tied up every stump, and zigzagged into every tree trunk in the woods.

But all this maze was no ordinary journey. He had not run this coil of a road for breakfast, because a squirrel, when he travels, say for distant nuts, goes as directly as you go to your school or office; only he goes not by streets, but by trees, never crossing more of the open in a single rush than the space between him and the nearest tree that will take him on his way.

What interested us here in the woods was the fact that a second series of tracks, just like the first, except that they were only about half as large, dogged the larger tracks persistently, leaping tree for tree, and landing track for track with astonishing accu-

racy — tracks which, had they not been evidently those of a smaller squirrel, would have read to us most menacingly.

As this was the mating season for squirrels, I suggested that it might have been a kind of Atalanta's race here in the woods. But why did so little a squirrel want to mate with one so large? They would not look well together, was the answer of the small boys. They thought it much more likely that Father Squirrel had been playing wood-tag with one of his children.

Then, suddenly, as sometimes happens in the woods,

the true meaning of the signs was fairly hurled at us, for down the hill, squealing and panting, rushed a full-sized gray squirrel, with a red squirrel like a shadow, like a weasel, at his heels.

For just an instant I thought it was a weasel, so swift and silent and gliding were its movements, so set and cruel seemed its expression, so sure, so inevitable, its victory.

Whether it ever caught the gray squirrel or not,

and what it would have done had it caught the big fellow, I do not know. But I have seen the chase often — the gray squirrel nearly exhausted with fright and fatigue, the red squirrel hard after him. They tore round and round us, then up over the hill, and disappeared.

One of the rarest prints for most snow-hunters nowadays, but one of the commonest hereabouts,

is the quick, sharp track of the fox. In the spring particularly, when my fancy young chickens are turned out to pasture, I have spells of fearing that the fox will never be exterminated here in this untillable but beautiful chicken country. In the winter, however, when I see Reynard's trail across my lawn, when I hear the music of the baying hounds and catch a glimpse of the white-tipped brush swinging serenely in advance of the coming pack, I cannot but admire the capable, cunning rascal, cannot but be glad for him, and marvel at him, so resourceful, so superior to his almost impossible conditions, his almost numberless foes.

We started across the meadow on his trail, but found it leading so straightaway for the ledges, and so continuously blotted out by the passing of the

pack, that, striking the wallowy path of a muskrat in the middle of the meadow, we took up the new scent to see what the shuffling, cowering water-rat wanted from across the snow.

A man is known by the company he keeps, by the way he wears his hat, by the manner of his laugh; and among the wild animals nothing tells more of character than their manner of moving. You can read animal character as easily in the snow as you can read act and direction.

The timidity, the indecision, the lack of purpose, the restless, meaningless curiosity of this muskrat were evident from the first in the starting, stopping, returning, going-on track he had plowed out in the thin snow.

He did not know where he was going or what he was going for; he knew only that he insisted upon going back, but all the while kept going on; that he wanted to go to the right or to the left, yet kept moving straight ahead.

We came to a big wallow in the snow, where, in sudden fear, he had had a fit at the thought of something that might not have happened to him had he stayed at home. Every foot of the trail read, "He would if he could; if he could n't, how could he?"

We followed him on, across a dozen other trails, for it is not every winter night that the muskrat's feet get the better of his head, and, willy-nilly, take

him abroad. Strange and fatal weakness! He goes and cannot stop.

Along the stone wall of the meadow we tracked him, across the highroad, over our garden, into the orchard, up the woody hill to the yard, back down the hill to the orchard, out into the garden, and back toward the orchard again; and here, on a knoll just at the edge of the scanty, skeleton shadow where the sunlight fell through the trees, we lost him.

Two mighty wings, we saw, had touched the snow lightly here, and the lumbering trail had vanished as into the air.

Close and mysterious the shadowy silent wings hang poised indoors and out. Laughter and tears are companions. Life begins, but death sometimes ends the trail. Yet the sum of life, outdoors and in, is peace, gladness, and fulfillment.

CHAPTER II

THE TURKEY DRIVE

THE situation was serious enough for the two boys. It was not a large fortune, but it was their whole fortune, that straggled along the slushy road in the shape of five hundred weary, hungry turkeys, which were looking for a roosting-place.

But there was no place where they could roost, no safe place, as the boys well knew, for on each side of the old road stretched the forest trees, a dangerous, and in the weakened condition of the turkeys, an impossible roost on such a night as was coming.

For the warm south wind had again veered to the north; the slush was beginning to grow crusty, and a fine sifting of snow was slanting through the open trees. Although it was still early afternoon, the gloom of the night had already settled over the forest, and the turkeys, with empty crops, were peevishly searching the bare trees for a roost.

It was a strange, slow procession that they made, here in the New Brunswick forest—the flock of five hundred turkeys, toled forward by a boy of eighteen, kept in line by a well-trained shepherd-dog that raced up and down the straggling column, and

urged on in the rear by a boy of nineteen, who was followed, in his turn, by an old horse and farm wagon, creeping along behind.

It was growing more difficult all the time to keep the turkeys moving. But they must not be allowed to stop until darkness should put an end to the march. And they must not be allowed to take to the trees at all. Some of them, indeed, were too weak to roost high; but the flock would never move forward again if exposed in the tall trees on such a night as this promised to be.

The thing to do was to keep them stirring. Once allow them to halt, give one of them time to pick out a roosting-limb for himself, and the march would be over for that afternoon. The boys knew their flock. This was not their first drive. They knew from experience that once a turkey gets it into his small head to roost, he is bound to roost. Nothing will stop him. And in this matter the flock acts as a single bird.

In the last village, back along the road, through which they had passed, this very flock took a notion suddenly to go to roost, and to go to roost on a little chapel as the vesper bells were tolling. The bells were tolling, the worshipers were gathering, when, with a loud gobble, one of the turkeys in the flock sailed into the air and alighted upon the ridge-pole beside the belfry! Instantly the flock broke ranks, ran wildly round the little building, and with

a clamor that drowned the vesper bell, came down on the chapel in a feathered congregation that covered every shingle of the roof. Only the humor and quick wit of the kindly old priest prevented the superstitious of his people from going into a panic. The service had to wait until the birds made themselves comfortable for the night — belfry, roof, window-sills, and porch steps thick with roosting turkeys!

The boys had come to have almost a fear of this mania for roosting, for they never knew when it might break out or what strange turn it might take. They knew now, as the snow and the gray dusk began to thicken in the woods, that the flock must not go to roost. Even the dog understood the signs, — the peevish *quint, quint, quint,* the sudden bolting of some gobbler into the brush, the stretching necks, the lagging steps, — and redoubled his efforts to keep the line from halting.

For two days the flock had been without food. Almost a week's supply of grain, enough to carry them through to the border, had been loaded into the wagon before starting in upon this wild, deserted road through the Black Creek region; but the heavy, day-long snowstorm had prevented their moving at all for one day, and had made travel so nearly impossible since then that here they were, facing a blizzard, with night upon them, five hundred starving turkeys straggling wearily before them, and a two days' drive yet to go!

The two brothers had got a short leave from college, and had started their turkey drive in the more settled regions back from the New Brunswick border. They had bought up the turkeys from farm to farm, had herded them in one great flock as they drove them leisurely along, and had moved all the while toward the state line, whence they planned to send them through Maine for the New England market. Upon reaching the railroad, they would rest and feed the birds, and ship them, in a special freight-car ordered in advance, to a Boston commission house, sell the horse and rig for what they could get, and, with their dog, go directly back to college.

More money than they actually possessed had gone into the daring venture. But the drive had been more than successful until the beginning of the Black Creek road. The year before they had gone over the same route, which they had chosen because it was sparsely settled and because the prices were low. This year the farmers were expecting them; the turkeys were plentiful; and the traveling had been good until this early snow had caught them here in the backwoods and held them; and now, with the sudden shift of the wind again to the north, it threatened to delay them farther, past all chance of bringing a single turkey through alive.

But George and Herbert Totman had not worked their way into their junior year at college to sit down by the roadside while there was light to travel

by. They were not the kind to let their turkeys go to roost before sundown. It was a slow and solemn procession that moved through the woods, but it moved — toward a goal that they had set for that day's travel.

All day, at long intervals, as they had pushed along the deep forest road, the muffled rumble of distant trains had come to them through the silence; and now, although neither of them had mentioned it, they were determined to get out somewhere near the tracks before the night and the storm should settle down upon them. Their road, hardly more here than a wide trail, must cross the railroad tracks, as they remembered it, not more than two or three miles ahead.

Leaving more and more of the desolate forest behind them with every step, they plodded doggedly on. But there was so much of the same desolate forest still before them! Yet yonder, and not far away, was the narrow path of the iron track through the interminable waste; something human — the very sight of it enough to warm and cheer them. They would camp to-night where they could see a train go by.

The leaden sky lowered closer upon them. The storm had not yet got under full headway, but the fine icy flakes were flying faster, slanting farther, and the wind was beginning to drone through the trees.

Without a halt, the flock moved on through the

thickening storm. But the dog was having all that he could do to keep the stragglers in order; and George, in the rear, saw that they must stir the flock, for the birds were gradually falling back into a thick bunch before him.

Hurrying back to the wagon, he got two loaves of bread, and ran ahead with them to Herbert. The famished turkeys seemed to know what he carried, and broke into a run after him. For half a mile they kept up the gait, as both boys, trotting along the road, dropped pieces of bread on the snow.

Then the whole game had to be repeated; for the greater part of the flock, falling hopelessly behind, soon forgot what they were running after, and began to cry, "*Quint! quint! quint!*" — the roosting-cry! So, starting again in the rear with the bread, George carried the last of the flock forward for another good run.

"We should win this game," Herbert panted, "if we only had loaves enough to make a few more touch-downs."

"There 's half an hour yet to play," was George's answer.

"But what on?"

"Oh, on our nerve now," the older boy replied grimly.

"That railroad is not far ahead," said Herbert.

"Half an hour ahead. We 've got to camp by that track to-night or —"

"Or what?"

But George had turned to help the dog head off some runaways.

Herbert, picking up a lump of frozen leaves and snow, began to break this in front of the flock to tole them on.

He had hardly started the birds again, when a long-legged gobbler brushed past him and went swinging down the road, calling, "*Quint! quint! quint!*" to the flock behind. The call was taken up and passed along the now extended line, which, breaking immediately into double-quick, went streaming after him.

Herbert got out of the way to let them pass, too astonished for a moment to do more than watch them go. It was the roosting-cry! An old gobbler had given it; but as it was taking him, for once, in the right direction, Herbert ordered back the dog that had dashed forward to head him off, and fell in with George to help on the stragglers in the rear.

As the laggards were brought up to a slight rise in the road, the flock was seen a hundred yards ahead, gathered in a dark mass about a telegraph-pole! It could be nothing else, for through the whirling snow the big cross-arms stood out, dim but unmistakable.

It was this that the gobbler had spied and started for, this sawed and squared piece of timber, that had suggested a barnyard to him, — corn and roost, —

as to the boys it meant a human presence in the forest and something like human companionship.

It was after four o'clock now, and the night was hard upon them. The wind was strengthening every minute; the snow was coming finer and swifter. The boys' worst fears about the storm were beginning to be realized.

But the sight of the railroad track heartened them. The strong-armed poles, with their humming wires, reached out hands of hope to them; and getting among the turkeys, they began to hurry them off the track and down the steep embankment, which fortunately offered them here some slight protection from the wind. But as fast as they pushed the birds off, the one-minded things came back on the track. The whole flock, meanwhile, was scattering up and down the iron rails and settling calmly down upon them for the night.

They were going to roost upon the track! The railroad bank shelved down to the woods on each side, and along its whitened peak lay the two black rails like ridge-poles along the length of a long roof. In the thick half-light of the whirling snow, the turkeys seemed suddenly to find themselves at home: and as close together as they could crowd, with their breasts all to the storm, they arranged themselves in two long lines upon the steel rails.

And nothing could move them! As fast as one was tossed down the bank, up he came. Starting

down the lines, the boys pushed and shoved to clear the track; but the lines re-formed behind them quickly, evenly, and almost without a sound. As well try to sweep back the waves of the sea! They worked together to collect a small band of the birds and drive them into the edge of the woods; but every time the band dwindled to a single turkey that dodged between their legs toward its place on the roost. The two boys could have kept *two* turkeys off the rails, but not five hundred.

"The game is up, George," said Herbert, as the sickening thought of a passing train swept over him.

The words were hardly uttered when there came the *tankle, tankle* of the big cow-bell hanging from the collar of the horse, that was just now coming up to the crossing!

George caught his breath and started over to stop the horse, when, above the loud hum of the wires and the sound of the wind in the forest trees, they heard through the storm the muffled whistle of a locomotive.

"Quick! The horse, Herbert! Hitch him to a tree and come!" called George, as he dived into the wagon and pulled out their lantern. "Those birds could wreck the train!" he shouted, and hurried forward along the track with his lighted lantern in his hand.

It was not the thought of the turkeys, but the thought of the people on the flying Montreal express,

— if that it was, — that sped him up the track. In his imagination he saw the wreck of a ditched train below him; the moans of a hundred mangled beings he heard sounding in his ears!

On into the teeth of the blinding storm he raced, while he strained his eyes for a glimpse of the coming train.

The track seemed to lie straightaway in front of him, and he bent his head for a moment before the wind, when, out of the smother of the snow, the flaring headlight leaped almost upon him.

He sprang aside, stumbled, and pitched headlong down the bank, as the engine of a freight, with a roar that dazed him, swept past.

But the engineer had seen him, and there was a screaming of iron brakes, a crashing of cars together, and a long-drawn shrieking of wheels, as the heavy train slid along the slippery rails to a stop.

As the engineer swung down from his cab, he was met, to his great astonishment, by a dozen turkeys clambering up the embankment toward him. He had plowed his way well among the roosting flock and brushed them unhurt from the rails as the engine skidded along to its slow stop.

By this time the conductor and the train-hands had run forward to see what it all meant, and stood looking at the strange obstruction on the track, when Herbert came into the glare of the headlight and joined them. Then George came panting up, and

the boys tried to explain the situation. But their explanation only made a case of sheer negligence out of what at first had seemed a mystery to the trainmen. Both the engineer and the conductor were anxious and surly. Their train was already an hour late; there was a through express behind, and the track must be cleared at once.

And they fell at once to clearing it — conductor, fireman, brakemen, and the two boys. Those railroad men had never tried to clear a track of roosting turkeys before. They cleared it, — a little of it, — but it would not stay cleared, for the turkeys slipped through their hands, squeezed between their legs, ducked about their heels, and got back into place. Finally the conductor, putting two men in line on each rail, ordered the engineer to follow slowly, close upon their heels, with the train, as they scattered the birds before them.

The boys had not once thought of themselves. They had had no time to think of anything but the danger and the delay that they had caused. They helped with all their might to get the train through, and as they worked, silently listened to the repeated threats of the conductor.

At last, with a muttered something, the conductor kicked one of the turkeys into a fluttering heap beneath the engine, and, turning, commanded his crew to stand aside and let the engineer finish the rest of the flock.

The men got away from the track. Then, catching Herbert by the arm, George pointed along the train, and bending, made a tossing motion toward the top of the cars.

"Quick!" he whispered. "One on every car!" and stepping calmly back in front of the engine, he went down the opposite side of the long train.

As he passed the tender, he seized a big gobbler, and sent him with a wild throw up to the top of a low coal-car, just as Herbert, on his side, sent another fluttering up to the same perch. Both birds landed with a flap and a gobble that were heard by the other turkeys up and down the length of the train.

Instantly came a chorus of answering gobbles as every turkey along the track saw, in the failing light, that real buildings — farmyard buildings — were here to roost on! And into the air they went, helped all along the train by the two boys, who were toss-

ing them into the cars, or upon the loads of lumber, as fast as they could pass from car to car.

Luckily, the rails were sleety, and the mighty driving-wheels, spinning on the ice with their long load, which seemed to freeze continually to the track, made headway so slowly that the whole flock had come to roost upon the cars before the train was fairly moving.

Conductor and brakeman, hurrying back to board the caboose, were midway of the train before they noticed what was happening. *How* it was happening they did not see at all, so hidden were the movements of the two boys in the swirl of the blinding snow.

For just an instant the conductor checked himself. But it was too late to do anything. The train was moving, and he must keep it moving as fast as he could to the freight-yards ahead at the junction — the very yards where, even now, an empty car was waiting for the overdue turkeys.

As he ran on down the track and swung aboard the caboose, two other figures closed in behind the train. One of them, seizing the other by the arm, landed him safe upon the steps, and then shouted at him through the storm: —

"Certainly you shall! I'm safe enough! I'll drive on to that old sawmill to-night. Feed 'em in the morning and wait for me! Good-by," and as the wind carried his voice away, George Totman found himself staring after a ghost-white car that had vanished in the storm.

He was alone; but the thought of the great flock speeding on to the town ahead was company enough. Besides, he had too much to do, and to do quickly, to think of himself; for the snow was blocking his road, and the cold was getting at him. But how the wires overhead sang to him! How the sounding forest sang to him as he went back to give the horse a snatch of supper!

He was soon on the road, where the wind at his back and the tall trees gave him protection. The four-wheeled wagon pulled hard through the piling snow, but the horse had had an easy day, and George kept him going until, toward eight o'clock, he drew up behind a lofty pile of slabs and sawdust at the old mill.

A wilder storm never filled the resounding forests of the North. The old mill was far from being proof against the fine, icy snow; but when George rolled himself in his heavy blanket and lay down beside his dog, it was to go to sleep to the comfortable munching of the horse, and with the thought that Herbert and the turkeys were safe.

And they were safe. It was late in the afternoon the next day when George, having left the wagon at the mill, came floundering behind the horse through the unbroken road into the streets of the junction, to find Herbert anxiously waiting for him, and the turkeys, with full crops, trying hard to go to roost inside their double-decked car.

CHAPTER III

WHITE-FOOT

THE December rain was falling down, down, down, as if the drops were lead instead of water. The December sky, if you could call it sky, had settled down, down, down, as if it too were of lead, and were being propped up only by the tops of the stiff bare trees.

A green stick in the fireplace behind me sizzled and sputtered and blew its small steam whistles to warn me away from the window, — from the sight of the naked trees, and the cold, thick fog upon the meadow, and the blur of the pine woods beyond, and the rain falling down, down, down.

A dreary world out of doors surely, with not a sign of life! The pine tree, rising up above the hillside in front of the window, was green, but only a few lifeless leaves rattled among the middle branches of the oaks, while up in the stark top of a hickory sapling was wedged a robin's nest, deserted and wet and going to pieces.

I shivered, in spite of the hearth-fire behind me, for the face of the gray gloom pressed close up against the window outside. And the empty robin's

nest, already a ruin! its mud walls broken, its tiny timbers hanging loose in the rain!

But what a large nest for a robin, I thought; and how strangely peaked and pointed it is, like a little haycock! Then all at once, inside of me, and all over me, I felt a warm, delightful feeling.

"It is n't possible," said I aloud, but all to myself; "it is n't possible that little White-Foot has moved into that old robin's nest and fitted it up with a peaked roof for the winter?"

And the thought of it started the warm, delightful feeling again inside of me and all over me; and snatching up the tongs by the fireplace I ran out into the December rain and tapped a few times on the slender hickory sapling.

And what do you think happened?

It stopped raining?

No.

You broke your tongs?

No.

The nest fell out and hit you on the head?

No.

You ran back into the house again out of the rain?

Yes, I did, and I went straight to the window and looked out again at the robin's nest,—my deserted, ruined robin's nest, with its thick thatch of waterproof cedar bark, with its little round door-hole in the side, with its soft furry bed, all toasty warm, out

of which with my tapping tongs I had just roused White-Foot and brought him sleepy-eyed to look down at me from his door.

The rain continued to fall down; but my spirits went up, and up, at the thought of that little mouse all safe and warm for the winter in Robin's deserted nest.

And so, if "there are no birds in last year's nest," as mourns a doleful poem, you need not be sad on that account, for if you look closely, you may find, now and then, a mouse in last year's nest — and who will say that finding a mouse in a bird's nest is not almost as interesting as finding a bird there?

A robin's nest in the winter-time would be the wettest, muddiest, coldest place in the world for a robin; but a mouse can take that old robin's nest and turn it into a snuggery (if you know what a "snuggery" is) so cozy and warm that neither the tip of Mr. Mouse's sharp nose, nor the tip of his thin ears, nor the tippy-tip of his long bare tail ever feels one sharp nip of the cold outside.

So, if there are no birds in last year's nest (as surely there ought not to be), take your tongs and tap, or, better, climb up, and reach gently into the nest with your finger, for a mouse may be waiting inside to bite you, — and that would be interesting.

For a mouse is interesting — just as interesting in his mousy ways as a whale in his whalish ways, or a robin in his ways. Can you name anything that

does not grow interesting as soon as you begin to watch and study it? Large things, small things, Bengal tigers or earthworms — all things will surprise and interest you if you will study them for a season.

I have a friend, for instance, who has shot more tigers, in more lands, than any other living man; who knows more about tiger habits and the tempers of the dangerous beasts than any other man; and who, as I am writing this, is himself writing a book which is to be called "Tiger Lands." That will be an exciting book, no doubt, for he has had adventures that made my hair stand up on my head, just to hear about. Yet I very much doubt if that book, with all its man-eaters, will be any more interesting or any more valuable to us than Darwin's book on earthworms.

So am I going to sigh because there are no birds in last year's nests? Had the poem said, "there are no *mice* in last year's nests," that might have made me sad, perhaps; though I am sure that I could go into the woods almost any winter day and find plenty of old *stumps* with mice in them. And I am equally sure that there will be plenty of birds in next summer's nests; so, until the robins come back and build new nests, I am going to look out of the window these dark December days, and think of White-Foot in Robin's old nest, high up there in the slender sapling, where no cat can climb to

"THERE HE WILL SWING IN THE WINTER GALES"

him, and where no crow will dare come to tear his house to pieces.

There he will swing in the winter gales with the snow swirling around and beneath him; there he will dream through the rain and the slanting sleet when his high sapling stairway is coated with ice and impossible for him to climb; there he will live, and whenever I thump with the tongs at his outer gate, up there in the little round doorway will appear his head — his eyes, I should say, for he looks all eyes up there, so large, so black, so innocent, so inquiring are they, so near to rolling off down the tip of his nose with sheer surprise.

I shall have many a cheering glimpse of White-Foot, many a comforting thought of him, out there, his thatch snow-covered, his thick-walled nest in the slender hickory riding the winter seas that sweep the hilltop, as safe as the ships anchored yonder in the landlocked harbor; and he will be much more comforting to me out there than here in the house with me; for, strangely enough, while White-Foot never seems to join the common mice in the barn, never a winter goes by without one or more of his kind coming into the house for the cold weather.

This would be very pleasant if they could keep out of the pop-corn and the nuts and the apples and the linen-drawers. But only recently one got into the linen in the china-closet, and *chewed together* the loveliest damask nest that any being ever slept in.

There was nothing for such conduct, then, of course, except to kill her. But I did not kill her, though I take no credit to myself, for I tried to kill her, as any one would have been tempted to do.

I got her out of that linen-drawer in a hurry and chased her from cupboard to couch, to radiator and bookcase, and lost her. The next day I resumed the chase, and upset most of the furniture before she finally gave me the slip. The next day she appeared, and once more we turned things upside down, and once more from some safe corner she watched me put the chairs back on their legs and pick up the pieces of things.

But the next morning, as I opened the grate of the kitchen stove to light the fire, there in the ash-pan huddled that little mouse; and under her in a bed of ashes, as if to reproach me forever, were five wee mice, just born, blind and naked in the choking dust, babes that should have been sleeping covered in a bed of downy damask in the linen-drawer.

I said I did not kill her. No, I reached in slowly, lifted her and her babes out softly in my hand, carried them into a safe, warm place and left them, devoutly hoping that they might all grow up to help themselves, if need be, to an ear of pop-corn, or even to a cozy corner and a sip of honey in the beehives.

No, I don't believe I hoped all of that, for White-Foot is exceedingly fond of honey, and no roof in all the out-of-doors is so much to his liking as a beehive, warm with the heat of the clustered swarm; and nowhere can he make such a nuisance of himself as inside the hive.

A robin's nest, a beehive, a linen-drawer, a woodpecker's hole — almost any place will do for the winter home, so thick and warm can the mice build their walls, so many bins of acorns and grain do they lay up, and so bold are they to forage when their winter stores run low.

I had a curious experience with a white-footed mouse in the cellar one winter. The small boys had carried into the cellar (to hide them from me, I imagine) about four quarts of chestnuts which they had gathered. A little later, when they went to get their nuts, the box was empty. Not a chestnut left!

"Have you eaten all our chestnuts, father?"

"No, I haven't — not a nut," I answered.

"Well, they are all gone!" was the wail.

And so they were, but how, and where, we did not know. House mice had not eaten them, for no shells were left behind; there were no rats or squirrels in the cellar that fall; and as for one of the small boys — that was past thought. The fact is, more suspicion was attached to me in the case than anything in my previous conduct called for; and, though altogether guiltless, I continued to be uncomfort-

ably quizzed from time to time about those chestnuts, until I began to wonder if I *had* got up in my sleep and devoured the four quarts, shells and all.

Then one day, while we were putting things shipshape in the vegetable cellar, what did we come upon but a nice little pile of chestnuts hidden away in a dark corner; then we discovered another pile, laid up carefully, neatly, in a secret spot, where no human eye — except the human house-cleaning eye, that misses nothing — would ever have seen them, and where no big human hand would ever have put them.

I was allowed to go then and there scot-free; and a trap was set for the wood mouse. It was White-Foot, we knew. But we never caught her. And I am glad of it, for after we took away what chestnuts we could find, she evidently felt it necessary to make a new hoard, and began with a handful of old hickory-nuts, shagbarks, that had been left in the vegetable cellar beside the box of chestnuts.

Now, however, she felt the insecurity of the inner cellar, or else she had found a fine big bin out in the furnace cellar, for out there by the furnace she took those nuts and tucked them compactly away into the toe of one of my tall hunting-boots.

There were double doors and a brick partition wall between the two cellars. No matter. Here were the nuts she had not yet stored; and out yonder

was the hole, smooth and deep and dark, to store them in. She found a way past the partition wall.

Every morning I shook those nuts out of my boot and sent them rattling over the cellar floor. Every night the mouse gathered them up and put them snugly back into the toe of the boot. She could not have carried more than one nut at a time — up the tall boot-leg and down the oily, slippery inside.

I should have liked to see her scurrying about the cellar, looking after her curiously difficult harvest. Apparently, they were new nuts to her every evening. Once I came down to find them lying untouched. The mouse, perhaps, was away over night on other business. But the following morning they were all gathered and nicely packed in the boot as before. And as before I sent them sixty ways among the barrels and boxes of the furnace room.

But I did it once too often, for it dawned upon the mouse one night that these were the same old nuts that she had gathered now a dozen times. That night they disappeared. Where? I wondered.

Weeks passed, and I had entirely forgotten about the nuts, when I came upon them, the identical nuts of my boot, tiered carefully up in a corner of the deep, empty water-tank away off in the attic!

CHAPTER IV

A CHAPTER OF THINGS TO SEE THIS WINTER

I

THE first snowstorm! I would not miss seeing the first snowstorm, not if I had to climb up to my high, tarry, smoky roof in the city and lie down on my back, as I once did, in order to shut out everything but the gray wavering flakes that came scattering from the sky. But how marvelously white and airy they looked, too, coming down over the blackened city of roofs, transfiguring it with their floating veil of purity! You must see the first snowfall, and, if you want to, jump and caper with the flakes, as I always do.

II

The sorrows of winter are its storms. They are its greatest glories also. One should no more miss the sight of the winter storms than he should miss the sight of the winter birds and stars, the winter suns and moons! A storm in summer is only an incident; in winter it is an event, a part of the main design. Nature gives herself over by the month to the planning and bringing off of the winter storms — vast arctic shows, the dreams of her wildest moods, the

work of her mightiest minions. Do not miss the soft feathery fall that plumes the trees and that roofs the sheds with Carrara marble; the howling blizzard with its fine cutting blast that whirls into smoking crests; the ice-storm that comes as slow, soft rain to freeze as it falls, turning all the world to crystal: these are some of the miracles of winter that you must not fail to see.

III

You must see how close you had passed to and fro all summer to the vireo's nest, hanging from the

fork on a branch of some low bush or tree, so near to the path that it almost brushed your hat. Yet you never saw it! Go on and make a study of the empty nests; see particularly how many of them were built

out along the roads or paths, as if the builders wished to be near their human neighbors — as, indeed, I believe they do. Study how the different birds build — materials, shapes, finish, supports; for winter is the better season in which to make such study, the summer being so crowded with interests of its own.

IV

When the snow hardens, especially after a strong wind, go out to see what you can find in the wind furrows of the snow — in the holes, hollows, pockets, and in footprints in the snow. Nothing? Look again, closely — that dust — wind-sweepings — seeds!

Yes, seeds. Gather several small boxes of them and when you return home take a small magnifying glass and make them out — the sticktights, gray birches, yellow birches, pines, ragweeds, milfoil — I cannot number them! It is a lesson in the way the winds and the snows help to plant the earth. Last winter I followed for some distance the deep frozen tracks of a fox, picking out the various seeds that had drifted into every footprint, just so far apart, as if planted in the snow by some modern planting-machine. It was very interesting.

V

When the snow lies five or six inches deep, walk out along the fence-rows, roadsides, and old fields to see the juncos, the sparrows, and goldfinches feeding upon the seeds of the dead weeds standing stiff and brown above the snow. Does the sight mean anything to you? What does it mean?

VI

Burns has a fine poem beginning —

"When biting Boreas, fell and doure,
Sharp shivers thro' the leafless bow'r,"

in which, he asks, —

"Ilk happing bird — wee, helpless thing! —
. . . . . .
What comes o' thee?
Whare wilt thou cow'r thy chittering wing,
An' close thy e'e?"

Did you ever ask yourself the question? Go forth, then, as the dusk begins to fall one of these chill winter days and try to see "what comes o'" the birds, where they sleep these winter nights. You will find an account of my own watching in a chapter called "Birds' Winter Beds" in "Wild Life Near Home."

VII

You will come back from your watching in the dusk with the feeling that a winter night for the birds is unspeakably dreary, perilous, and chill. You will close the door on the darkness outside with a shiver as much from dread as from the cold.

"List'ning the doors an' winnocks rattle," —

you will think of the partridge beneath the snow, the crow in his swaying pine-top, the kinglet in the close-armed cedar, the wild duck riding out the storm in his freezing water-hole, and you will be glad for your four thick walls and downy blankets, and you will wonder how any creature can live through the long, long night of cold and dark and storm. But there is another view of this same picture; another picture, rather, of this same stormy, bitter night which you must not miss seeing. Go out to see how the animals sleep, what beds they have, what covers to keep off the cold: the mice in the corn-shocks; the muskrats in their thick mud homes; the red squirrels in their rocking, wind-swung beds, so soft

with cedar bark and so warm that never a tooth of the cold can bite through!

"I heard nae mair, for Chanticleer
Shook off the pouthery snaw,
And hail'd the morning with a cheer,
A cottage-rousing craw."

VIII

This winter I have had two letters asking me how best to study the mosses and lichens, and I answered, "Begin now." Winter, when the leaves are off, the ground bare, the birds and flowers gone, and all is reduced to singleness and simplicity — winter is the time to observe the shapes, colors, varieties, and growth of the lichens. Not that every lover of nature needs to know the long Latin names (and many of these lesser plants have no other names), but that every lover of the out-of-doors should notice them — the part they play in the color of things, the place they hold in the scheme of things, their exquisite shapes and strange habits.

IX

You should see the brook, "bordered with sparkling frost-work . . . as gay as with its fringe of summer flowers." You should examine under a microscope the wonderful crystal form of the snowflakes — each flake shaped by an infinitely accurate hand according to a pattern that seems the perfection, the very poetry, of mechanical drawing.

X

What a world of gray days, waste lands, bare woods, and frozen waters there is to see! And you should see them — gray and bare and waste and frozen. But what is a frozen pond for if not to be skated on? and waste white lands, but to go sleighing over? and cold gray days, but so many opportunities to stay indoors with your good books?

See the winter bleak and cheerless as at times you will, and as at times you ought; still if you will look twice, and think as you look, you will see the fishermen on the ponds catching pickerel through the ice — life swimming there under the frozen surface! You will see the bare empty woodland fresh budded to the tip of each tiny twig — life all over the trees thrust forward to catch the touch of spring! You will see the wide flinty fields thick sown with seeds — life, more life than the sun and the soil can feed, sleeping there under "the tender, sculpturesque, immaculate, warming, fertilizing snow"!

CHAPTER V

CHRISTMAS IN THE WOODS

"'T was the night before Christmas, and all through the house
Not a creature was stirring, not even a mouse."

BUT on the night before this particular Christmas every creature of the woods that could stir was up and stirring; for over the old snow was falling swiftly, silently, a soft, fresh covering that might mean a hungry Christmas unless the dinner were had before morning.

Yet, when the morning dawned, a cheery Christmas sun broke across the great gum swamp, lighting the snowy boles and soft-piled limbs of the giant trees with indescribable glory, and pouring, a golden flood, into the deep, spongy bottom of the swamp below. It would be a perfect Christmas in the woods, clear, mild, stirless, with silent footing for me, and everywhere the telltale snow.

And everywhere in the woods would be the Christmas spirit, too. As I paused among the pointed cedars of the pasture, looking down into the tangle at the head of the swamp, a clear, wild whistle rang in the thicket, followed by a flash through the alders like a tongue of fire, as a cardinal grosbeak shot down to the tangle of greenbrier and magnolia under the

slope of the hill. The bird was a fleck of flaming summer. As warm as summer, too, were the pointed cones of stag-horn sumac burning on the crest of the ridge against the group of holly trees — trees as fresh as April, and all aglow with red berries.

The woods were decorated for the Holy Day. The gentleness of the soft, new snow touched everything; cheer and good-will lighted the unclouded sky and warmed the thick depths of the evergreens, and blazed in the crimson-berried bushes of the ilex and the alder. The Christmas woods were glad. The heart of the woods was full of Christmas peace.

Now I did not imagine all of this as I went along. Perhaps there was the spirit of Christmas in my heart, and so I found the spirit of Christmas in the woods; but so it must have been with the household I had just left, back on the city street. Every one had Christmas in his heart, and so every one found Christmas in the Christmas-tree blazing and glittering in its candle-flame blossoms and jeweled fruit.

So there was real Christmas joy and peace — a real Christmas spirit — abroad in the woods this snowy Christmas morning. The sky had it, the trees had it, the soft white slopes had it, the softly flowing creek had it, flowing softly toward the bay.

But doubtless my own feelings had something to do with it all. This was Christmas Day, and these were my home woods, the woods where I tramped and trapped and "grew up" when a boy; and this was

I, after twenty years of absence, I, the boy again, back in the old familiar pasture on my way to Lupton's Pond!

Yes, I must say that I was almost afraid as I followed the old cow-path across the pasture, now only a slightly sunken line in the snow; I was afraid that the path might be gone. Twenty years are a good many years for a cow-path to last. But evidently the cows had been crossing every year since I had been away; and not a single new crook had they worn in the old winding trail. Then I was afraid, as I came to the fence where I could look down upon the pond, lest the pond might have disappeared. But no, there it lay, sealed over, as if kept for me by the snow! Then I looked fearfully over the pond, over the steep ridge on the opposite shore to where there used to stand two particular persimmon trees.

My heart beat wildly for a moment. The woods up the ridge had been cut off! Things had changed! I was confused and looked this way and that, when, so near to me that I could scarcely believe my eyes, I saw the twin trees, their hard, angular limbs closely globed with fruit, and standing softly out against the sky!

It was enough. Forgetting the twenty years, I hurried down across the pond and up to the persimmon trees on the other side — up *into* the trees indeed, for I never stopped until I had climbed clear up into the top among the ripe persimmons!

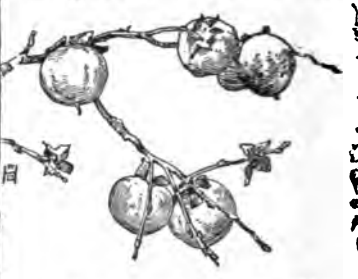
Do you know what a persimmon, picked from a particular tree along Cohansey Creek on Christmas Day, tastes like? especially when you have not had a taste of persimmon for twenty years? No, you do not — because you are not twenty years old, perhaps, and because you were not a boy along Cohansey Creek, perhaps, and because, if you were, you did not know those two particular persimmon trees, maybe.

Nobody ever seemed to know the perfection of those persimmons, except myself and the 'possums. Not one of the Luptons, who owned the pasture, the pond, and the trees, had ever been a boy, so far as I could remember, and certainly not one of them had ever tasted the fruit of those two trees. There were other persimmon trees up and down the township, others here along the pond; but these two were the only trees to hold their fruit until Christmas, preserved with such richness of flavor, such a gummy, candied, wild, woodsy quality, that it could not decay. Those persimmons never decayed. They candied, evaporated, wrinkled, fell, and vanished away.

Or else the 'possums ate them — those that I did not eat. A 'possum had already been here this Christmas morning before me. I had noted his fresh tracks beneath the tree when I came up; and now, in the tree, I saw where the snow had been brushed from several of the large limbs as the 'possum had moved about in the top, eating his Christmas dinner.

You never ate a Christmas dinner high up in the top of a persimmon tree? But you will, perhaps, some day, as good a Christmas dinner, I hope, as ours was.

For such persimmons! Bob Cratchit's goose ("There never was such a goose!") could not



have been any better flavored. Nor could the little Cratchits have been any hungrier for goose than I was for persimmons.

Now the 'possum had been having persimmons every night since the frosts of October; so of course he felt no such hunger for persimmons as I felt. But ripe persimmons would be a Christmas dinner for a 'possum every day in the year. There is nothing so unspeakably good as persimmons if you happen to be a 'possum, or if you happen to be a boy — even after twenty years!

So the 'possum and I had our Christmas dinner together at Nature's invitation, in the top of the

persimmon tree. The 'possum, to be sure, had eaten and gone before I came. But that is good form in the woods. He was expecting me, so he came early, just before dawn, that neither of us might be embarrassed, leaving his greetings for me in sign-language in the snow.

A Christmas dinner all alone would be cold cheer indeed. But I was not alone. Here was good company and plenty of it. Did not the tracks talk to me? With abundance of fruit still left in the tree, did I need to see that 'possum fold up his napkin, pull down his vest, spread his hands over his expansive person and groan in the fullness of his feast? No; all of that was printed plainly in the snow. Why, I could even hear his groans in his tumbled tracks at the foot of the tree, where the fat old fellow had literally fallen over himself! What an appetite! What a pudding of persimmons he must be! He can hardly walk for fat! Look at his trail in the snow leading down toward the pond — a big wide wallow where he has bounced along!

So I slide down the tree and take up the 'possum's trail. We have broken bread together, this 'possum and I, and now we will enter the woods together in the same good-fellowship for the rest of the day. Persimmons and good-will are very proper things to be filled with when you go into the Christmas woods.

And there is no better fellowship for such a tramp

than the trail of some animal like the 'possum or the mink or the fox. To go in with one of these through the woods-door is to find yourself at home. Any one can manage to get inside the woods, as the grocery boy or the census man manages to get inside our houses. You can bolt in at any time on business. But a *trail*, remember, is Nature's invitation. Go softly in with 'possum, or rabbit, or coon, and at the threshold of the trees you will be met by the Spirit of the Woods — you will be made a guest in this secret, shadowy house of the out-of-doors.

But do not fail first to break bread with the 'possum. A persimmon, or a handful of wintergreen berries, or a nip of sassafras root, or a piece of spruce gum, or a lump of liquid amber — share anything, take any small part in the life of these who live wild in the woods, and they will meet you at the threshold and make you more than welcome.

I went in with the 'possum. He had traveled home leisurely and without fear, as his tracks plainly showed. He was full of persimmons. A good happy world this, where such fare could be had for the picking! What need to hurry home? Unless, indeed, one were in danger of falling asleep by the way! So I thought, too, as I followed his winding path; and if I was tracking him to his den, it was only to wake him for a moment with the compliments of the season. But when I finally found him in his hollow gum, he was so sound asleep he barely knew that

some one was poking him gently in the ribs and wishing him a merry Christmas.

The 'possum had led me far along the creek to the centre of the empty, hollow swamp, where the great-boled gums lifted their branches like a timbered, unshingled roof between me and the wide sky. Far away through the spaces of the rafters I saw a pair of wheeling buzzards, and under them, in lesser circles, a broad-winged hawk. Here, at the feet of the tall, clean trees, looking up through the leafless limbs, I had something of a measure for the flight of the great birds. And what power, what majesty and mystery in those distant buoyant wings!

I have seen the turkey buzzard sailing the skies on the bitterest winter days. To-day, however, could hardly be called winter. Indeed, nothing yet had felt the pinch of the cold. There was no hunger yet in the swamp, though this new snow had scared the raccoons out, and their half-human tracks along the margin of the swamp stream showed that, if not hungry, they at least feared that they might be.

For a coon hates snow. He invariably stays in during the first light snowfalls, and even in the late winter he will not venture forth in fresh snow unless driven by hunger or some other dire need. Perhaps, like a cat or a hen, he dislikes the wetting of his feet. Or it may be that the soft snow makes bad hunting — for him. The truth is, I believe, that

such a snow makes too good hunting for the dogs and the gunner. The new snow tells too clear a story. For the coon's home is no dark den among the ledges; only a hollow in some ancient oak or tupelo. Once within, he is safe from the dogs, but his long, fierce fight for life taught him generations ago that the nest-tree is a fatal trap when behind the dogs come the axe and the gun. So he has grown wary and enduring. He waits until the snow grows crusty, when without sign, and almost without scent, he can slip forth among the long shadows and prowl to the edge of dawn.

Skirting the stream out toward the higher back woods, I chanced to spy a bunch of snow in one of the great sour gums, that I thought was an old nest. A second look showed me tiny green leaves, then white berries, then mistletoe!

It was not a surprise, however, for I had found it here before — a long, long time before. It was back in my schoolboy days that I first stood here under the mistletoe and had my first romance. There was no chandelier, no pretty girl, in that romance — only a boy, the mistletoe, the giant trees, and the sombre silent swamp. But there was more than that, there was the thrill of discovery, for until that day the boy did not know that mistletoe grew outside of England, did not know that it grew in his own native swamps! Rambling alone through the swamps along the creek that day, he stopped under a big curious

bunch of green, high up in one of the gums, and — made his first discovery!

So this Christmas Day the boy climbed up again at the peril of his precious neck, and brought down a bit of that old romance.

I followed the stream along through the swamp to the open meadows, and then on under the steep wooded hillside that ran up to the higher land of corn and melon fields. Here at the foot of the slope the winter sun lay warm, and here in the sheltered, briery border I came upon the Christmas birds.

There was a great variety of them, feeding and preening and chirping in the vines. The tangle was a-twitter with their quiet, cheery talk. Such a medley of notes you could not hear at any other season outside a city bird store. How far the different species understood one another I should like to know, and whether the hum of voices meant sociability to them, as it certainly did to me. Doubtless the first cause of their flocking here was the sheltered warmth and the great numbers of berry-laden bushes, for there was no lack of abundance or of variety on this Christmas table.

In sight from where I stood hung bunches of withering chicken, or frost, grapes, plump clusters of blue-black berries of the greenbrier, and limbs of the smooth winterberry beaded with their flaming fruit. There were bushes of crimson ilex, too, trees

of fruiting dogwood and holly, cedars in berry, dwarf sumac and seedy sedges, while patches on the wood slopes uncovered by the sun were spread with trailing partridge-berry and the coral-fruited wintergreen. I had eaten part of my dinner with the 'possum; now I picked a quantity of these wintergreen berries, and continued my meal with the birds. And they too, like the 'possum, had enough, and to spare.

Among the birds in the tangle was a large flock of northern fox sparrows, whose vigorous and continuous scratching in the bared spots made a most lively and cheery commotion. Many of them were splashing about in tiny pools of snow-water, melted partly by the sun and partly by the warmth of their bodies as they bathed. One would hop to a softening bit of snow at the base of a tussock, keel over and begin to flop, soon sending up a shower of sparkling drops from his rather chilly tub. A winter snow-water bath seemed a necessity, a luxury indeed; for they all indulged, splashing with the same purpose and zest that they put into their scratching among the leaves.

A much bigger splashing drew me quietly through the bushes to find a marsh hawk giving himself a Christmas souse. The scratching, washing, and talking of the birds; the masses of green in the cedars, holly, and laurels; the glowing colors of the berries against the snow; the blue of the sky, and the golden

warmth of the light made Christmas in the heart of the noon, that the very swamp seemed to feel.

Two months later there was to be scant picking here, for this was the beginning of the severest winter I ever knew. From this very ridge, in February, I had reports of berries gone, of birds starving, of whole coveys of quail frozen dead in the snow; but neither the birds nor I dreamed to-day of any such hunger and death. A flock of robins whirled into the cedars above me; a pair of cardinals whistled back and forth; tree sparrows, juncos, nuthatches, chickadees, and cedar-birds cheeped among the trees and bushes; and from the farm lands at the top of the slope rang the calls of meadowlarks.

Halfway up the hill I stopped under a blackjack oak, where, in the thin snow, there were signs of something like a Christmas revel. The ground was sprinkled with acorn-shells and trampled over with feet of several kinds and sizes, — quail, jay, and partridge feet; rabbit, squirrel, and mouse feet, all over the snow as the feast of acorns had gone on. Hundreds of the acorns were lying about, gnawed away at the cup end, where the shell was thinnest, many of them further broken and cleaned out by the birds.

As I sat studying the signs in the snow, my eye caught a tiny trail leading out from the others straight away toward a broken pile of cord-wood. The tracks were planted one after the other, so directly in line

as to seem like the prints of a single foot. "That 's a weasel's trail," I said, "the death's-head at this feast," and followed it slowly to the pile of wood. A shiver crept over me as I felt, even sooner than I saw, a pair of small, sinister eyes fixed upon mine.

The evil pointed head, heavy but alert, and with a suggestion of fierce strength out of all proportion to the slender body, was watching me from between the sticks of cord-wood. And just so had it been watching the mice and the rabbits and the birds feasting under the tree!

I packed a ball of snow round and hard, slipped forward upon my knees and hurled it. *Spat!* it struck the end of a stick within an inch of the ugly head, nearly filling the crevice with snow. Instantly the head appeared at another crack, and another ball

struck viciously beside it. Now it was back where it first appeared, nor did it flinch for the next ball, or the next. The third went true, striking with a *chug* and packing the crack. But the black, hating eyes were still watching me a foot lower down.

It is not all peace and good-will in the Christmas woods. But happily the weasels are few. More friendly and timid eyes were watching me than bold and murderous. It was foolish to want to kill — even the weasel, for one's woods are what one makes them. And so I let the man with the gun, who just then chanced along, think that I had turned boy again, and was snowballing the woodpile just for the fun of trying to hit the end of the biggest stick.

I was glad he had come. The sight of him took all hatred out of me. As he strode off with his stained bag I felt kindlier toward the weasel — there were worse in the woods than he. He must kill to live, and if he gloated over the kill, why, what fault of his? But the other, the one with the blood-stained game-bag, he killed for the love of killing. I was glad he had gone.

The crows were winging over toward their great roost in the pines when I turned toward the town. They, too, had had good picking along the creek flats and the ditches of the meadows. Their powerful wing-beats and constant play up in the air told of full crops and no fear for the night, already softly gray across the silent fields.

The air was crisper; the snow began to crackle under foot; the twigs creaked and rattled as I brushed along; a brown beech leaf wavered down and skated with a thin scratch over the crust; and pure as the snow-wrapped crystal world, and sweet as the soft gray twilight, came the call of a quail.

These were not the voices, colors, odors, and forms of summer. The very face of things had changed; all had been reduced, made plain, simple, single, pure! There was less for the senses, but how much keener now their joy! The wide landscape, the frosty air, the tinkle of tiny icicles, and, out of the quiet of the falling twilight, the voice of the quail!

There is no day but is beautiful in the woods; and none more beautiful than one like this Christmas Day — warm, and still, and wrapped to the round red berries of the holly in the magic of the snow.

CHAPTER VI

CHICKADEE

I WAS crunching along through the January dusk toward home. The cold was bitter. A half-starved partridge had just risen from the road and fluttered off among the naked bushes — a bit of life vanishing into the winter night of the woods. I knew the very hemlock in which he would roost; but what were the thick, snow-bent boughs of his hemlock, and what were all his winter feathers in such a night as this? — this night of cutting winds and frozen snow!

The road dipped from the woods down into a wide, open meadow, where the winds were free. The cold was driving, numbing here, with a power for death that the thermometer could not mark. I backed against the gale and sidewise hastened forward toward the double line of elms that arched the road in front of the house. Already I could hear them creak and rattle like things of glass. It was not the sound of life. Nothing was alive; for what could live in this long darkness and fearful cold?

The question was hardly thought, when an answer was whirled past me into the nearest of the naked

elms. A chickadee! He caught for an instant on a dead stub of a limb that stuck out over the road,

scrambled along to its broken tip, and whisked into a hole that ran straight down the centre of the old stub, down, for I don't know how far.

I stopped. The limb lay out upon the wind, with only an eddy of the gale sucking at the little round hole in the broken end, while somewhere far down in its hollow heart, huddling himself into a downy, dozy ball for the night, had crept the chickadee. I knew by the very way he struck the limb and by the way he turned in at the hole that he had been there before. He knew whither, across the sweeping meadows, he was being blown. He had even helped the winds as they whirled him, for, having tarried along the roads until late, he was in a great hurry to get home. But he was safe for the night now, in the very bed, it may be, where he was hatched last summer, and where at this moment, who knows, were crowded half a dozen other chickadees, the rest of that last summer's brood, unharmed still, and still sharing the

old home hollow, where they were as snug and warm this fierce, wild night as ever they were in the soft May days when they nestled here together.

The cold drove me on ; but the sight of the chickadee had warmed me, and all my shivering world of night and death. And so he ever does. For the winter has yet to be that drives him seeking shelter to the sunny south. I never knew it colder than in January and February of 1904. During both of those months I drove morning and evening through a long mile of empty, snow-buried woods. For days at a time I would not see even a crow, but morning and evening at a certain dip in the road two chickadees would fly from bush to bush across the hollow and cheer me on my way.

They came out to the road, really to pick up whatever scanty crumbs of food were to be found in my wake. They came also to hear me, and to see me go past — to escape for a moment, I think, from the silence, the desertion, and the death of the woods. They helped me to escape, too.

Four other chickadees, all winter long, ate with us at the house, sharing, so far as the double windows would allow, the cheer of our dining-room. We served them their meals on the lilac bush outside the window, tying their suet on so that they could see us and we could see them during meal-time. Perhaps it was mere suet, and nothing else at all, that they got; but constantly, when our " pie was opened, the

birds began to sing" — a dainty dish indeed, a dish of live, happy chickadees that fed our souls.

There are states in the far Northwest where the porcupine is protected by law, as a last food resource for men who are lost and starving in the forests. Porcupine is so slow that a dying man can catch him and make a meal on him. Perhaps the porcupine was not designed by nature for any such purpose, and would not approve of it at all. Perhaps Chickadee was not left behind by Summer to feed my lost and starving hope through the cheerless months of winter. But that is the use I make of him. He is Summer's pledge to me. He tells me that this winter world is a living world and not a dreary world of death. The woods are hollow, the winds are chill, the earth is cold and stiff, but there flits Chickadee, and — I cannot lose faith, nor feel that this procession of bleak white days is all a funeral! If Chickadee can live, then so can I.

He is the only bird in my out-of-doors that I can find without fail three hundred and sixty-five days in the year. From December to the end of March he comes daily to my lilac bush for suet; from April to early July he is busy with domestic cares in the gray birches down the hillside; from August to December he and his family come hunting quietly and sociably as a little flock among the trees and bushes of the farm; and from then on he is back again for his winter meals at "The Lilac."

Is it any wonder that he was the first bird I ever felt personally acquainted with? That early acquaintance, however, was not brought about by his great abundance, nor by his very bad, bold manners, as might be with the English sparrow. I got acquainted with him first, because he wanted to get acquainted with me, he is such a cheerful, confiding, sociable little bird! He drops down and peeps under your hat-brim to see what manner of boy you are, and if you are really fit to be abroad in this beautiful world, so altogether good both summer and winter — for chickadees.

He is not quite so sociable in summer as in winter, but if you were no bigger than a chickadee (two and one half inches without your tail!) and had eight babies nearly as big as yourself to hunt grubs for, besides a wife to pet and feed, do you think you could be very sociable? In the winter, however, he is always at liberty to stop and talk to you, a sweet little way he has that makes him the easiest bird in the world to get acquainted with.

Last winter while I was tying up a piece of suet that had fallen into the snow, a hungry and impatient chickadee lighted on the brim of my felt hat. The brim bent under him, and he came fluttering down against my nose, which I thought for an instant he was going to take for suet! He did n't snip it off, however, as a certain blackbird did a certain maiden's nose, but lighted instead on my shoulder. Then,

seeing the lump of suet in my hand, he flew up and perched upon my fingers and held on, picking at the suet all the time I was tying it fast in the bush.

He is a friendly little soul, who loves your neighborhood, as, indeed, most birds do; who has no fear of you, because he cannot think that you could fear him and so would want to hurt him.

Nature made him an insect-eater; but he has a mission to perform besides eating pestiferous insects, and their eggs and grubs. This destruction of insects he does that the balance of things may be maintained out of doors, lest the insects destroy us. He has quite another work to do, which is not a matter of grubs, and which in no wise is a matter of fine feathers or sweet voice, but simply a matter of sweet nature, vigor, and concentrated cheerfulness.

Chickadee is a sermon. I hear him on a joyous May morning calling *Chick-a-dee! dee! Chick-a-dee! dee!* — brisk, bright, and cheery; or, soft and gentle as a caress, he whistles, *Phœ-ee-bee! Phœ-ee-bee!* I meet him again on the edge of a bleak winter night. He is hungry and cold, and he calls, as I hasten along, *Chick-a-dee! dee! Chick-a-dee! dee!* brisk, bright, and cheery; or, following after me, he talks to me with words as soft and gentle as a caress.

Will you lend me your wings, Chickadee, your invisible wings on which you ride the winds of life so evenly?

The abundant summer, the lean and wolfish winter, find Chickadee cheerful and gentle. He is busier at some seasons than at others, with fewer chances for friendship. He almost disappears in the early summer. But this is because of family cares; and because the bigger, louder birds have come back, and the big leaves have come out and hidden him. A little searching, and you will discover him, in one of your old decayed fence-posts, maybe, or else deep in the swamp, foraging for a family of from six to eight, that fairly bulge and boil over from the door of their home.

Here about Mullein Hill, this is sure to be a gray-birch home. Other trees will do — on a pinch. I have found Chickadee nesting in live white oaks, maples, upturned roots, and tumbling fence-posts. These were shifts, only, mere houses, not real homes. The only good homelike trees are old gray birches, dead these many years and gone to punk — mere shells of tough circular bark walls. Halfway down the hill is a small grove of these birches that we call the Seminary (because, as a poet friend says, "they look like seminary girls in white frocks"). Here the chickadees love to build.

Why has Chickadee this very decided preference? Is it a case of protective coloration — the little gray and black bird choosing to nest in this little gray and black tree because bird and tree so exactly match one another in size and color? Or is there a strain

of poetry in Chickadee's soul, something fine, that leads him into this exquisite harmony — into this little gray house for his little gray self?

Explain it as you may, it is a fact that the little bird shows this marked preference, makes this deliberate choice; and in the choice is protection and poetry, too. Doubtless he follows the guidance of a sure and watchful instinct. But who shall deny to him a share of the higher, finer things of the imagination?

His life is like his home — gentle and sweet and idyllic. There is no happier spot in the summer woods than that about the birch of the chickadees; and none whose happiness you will be so little liable to disturb.

Before the woods were in leaf last spring I found a pair of chickadees building in a birch along the edge of the swamp. They had just begun, having dug out only an inch of the cavity. It was very interesting to discover them doing the excavating themselves, for usually they refit some abandoned chamber or adapt to their needs some ready-made hole.

The birch was a long, limbless cylinder of bark, broken off about fourteen feet up, and utterly rotten, the mere skin of a tree stuffed with dust. I could push my finger into it at any point. It was so weak that every time the birds lighted upon the top the whole stub wobbled and reeled. Surely they

were building their house upon the sand! Any creature without wings would have known that. The birds, however, because they have wings, seem to have lost the sense of such insecurity, often placing their nests as if they expected the nests themselves to take wings and fly to safety when the rains descend and the winds come.

This shaking stub of the chickadees was standing directly beneath a great overshadowing pine, where, if no partridge bumped into it, if two squirrels did not scamper up it together, if the crows nesting overhead in the pine did not discover it, if no strong wind bore down upon it from the meadow side, it might totter out the nesting-season. But it didn't. The birds were leaving too much to luck. I knew it, and perhaps I should have pushed their card house down, then and there, and saved the greater ruin later. Perhaps so, but who was I to interfere in their labor?

Both birds were at the work when I discovered them, and so busily at it that my coming up did not

delay them for a single billful. It was not hard digging, but it was very slow, for Chickadee is neither carpenter nor mason. He has difficulty killing a hard-backed beetle. So, whenever you find him occupying a clean-walled cavity, with a neat, freshly chipped doorway, you may be sure that some woodpecker built the house, and not this short-billed, soft-tailed little tit. Chickadee lacks both the bill chisel and the tail brace. Perhaps the explanation of his fondness for birch trees lies here — because the birch trees die young and soon decay!

The birds were going down through the broken-off top, and not by a hole through the leathery rind of the sides, for the bark was too tough for their beaks. They would drop into the top of the stub, pick up a wad of decayed wood and fly off to a dead limb of the pine. Here, with a jerk and a snap of their bills, they would scatter the punk in a shower so thin and far that I could neither hear it fall nor find a trace of it upon the dead leaves of the ground. This nest would never be betrayed by the workmen's chips, as are the woodpeckers' nest-holes.

Between the pair there averaged three beakfuls of excavating every two minutes, one of the birds regularly shoveling twice to the other's once. They looked so exactly alike that I could not tell which bird was pushing the enterprise; but I had my suspicions. It was Mrs. Chickadee!

Mr. Chickadee was doing only part of his duty,

and only half-heartedly at that! Hers was the real interest, the real anxiety. To be a Mr. Chickadee and show off! That's the thing!

I sat a long time watching the work. It went on in perfect silence, not a chirp, not the sound of a fluttering wing. The swamp along whose margin the birds were building had not a joyous atmosphere. Damp, dim-shadowed, and secret, it seemed to have laid its spell upon the birds. Their very color of gray and black was as if mixed out of the dusky colors of the swamp; their noiseless coming and going was like the slipping to and fro of small shadows. They were a part of the swamp—of its life, of its color, of its silence. They were children of the swamp, sharing its very spirit, and that sharing was their defense, the best protection that they could have had.

It didn't save their nest, however. They felt and obeyed the spirit of the Swamp in their own conduct, but the Swamp did not tell them where to build. Birds and animals have wonderful instinct, or family wisdom, but not much personal, individual wisdom.

It was about three weeks later when I stopped again under the pine and found the birch stub in pieces upon the ground. Some strong wind had come, or some robber had been after the eggs, and had brought the whole house tumbling down.

But this is not the fate of all such birch-bark

houses. Now and again they escape; yet when they do it is always a matter for wonder.

I was following an old disused wood-road once when I frightened a robin from her nest. Her mate joined her, and together they raised a great hubbub. Immediately a chewink, a pair of vireos, and two black and white warblers joined the robins in their din. Then a chickadee appeared. He had a worm in his beak. His anxiety seemed so real that I began to watch him, when, looking down among the stones for a place to step, what should I see but his mate emerging from the end of a tiny birch stump at my very feet! She had heard the racket and had come out to see what it was all about. At sight of her, Mr. Chickadee hastened with his worm, brushing my face, almost, as he darted to her side. She took the worm sweetly, for she knew he had intended it for her. But how do I know it was intended for her, and not for the young? There were no young in the nest; only eggs. Even after the young came (there were eight of them!), when life, from daylight to dark, was one ceaseless, hurried hunt for worms, I saw him over and over again fly to Mrs. Chickadee's side caressingly and tempt her to eat.

The house of this pair did not fall. How could it when it stood precisely two and a half feet from the ground? But that it was n't looted is due to the amazing boldness of its situation. It stood alone, close to the road, so close that the hub of a low wheel in

passing might have knocked it down. Perhaps a hundred persons had brushed it in going by. How many dogs and cats had overlooked it no one can say; nor how many skunks and snakes and squirrels. The accident that discovered it to me had happened apparently to no one else, so here it stood still safe, but only by the grace of Luck!

Cutting a tiny window in the bark just above the eggs, I looked in upon the little children every day. I watched them hatch, grow, and fill the cavity and hang over at the top. I was there the day they forced my window open; I was there the day when there was no more room at the top, and when, at the call of their parents, one child after another of this large, sweet bird family found his wings and flew away through the friendly woods.

CHAPTER VII

A CHAPTER OF THINGS TO DO THIS WINTER

I

YOU should go skating — crawling, I ought to say — over a pond of glare ice this winter. Take the pond you are most familiar with. Go early on a bright day, before any skater arrives, and lying flat upon the clear, "black" ice, study the bottom of the pond and the fish that swim below you. They have boats with glass bottoms along the California coast, through which to watch the marvelous bottoms off shore. But an Eastern pond covered with glare ice is as good, for such ice is a plate-glass window into a wonder world.

II

Fight your way one of these winter days to the crest of some high hill and stand up against a northwest gale. Feel the sweep of the winds from across the plain beneath you; hear them speaking close in your ear, as they fly past; catch them and breathe them, until they run red in your leaping veins. Master them, and make them, mighty as they are, your own. And something large and free, strong and sound will pass into you; and you will love the

great world more, and you will feel how fit a place for the strong of heart, is this earth to live on.

III

Keep a careful list of the winter birds you see; and visit every variety of wood, meadow, and upland in your neighborhood — not neglecting the parks and city trees — for a sight of the rarer winter visitors, such as the snowy owl, the snow buntings, and the crossbills.

IV

If you know little about the birds, then this is the time to begin your study. When they are so few and scarce? Yes, just because they are few and scarce. On a June morning (unless you are at home in the woods) you will be confused by the medley of songs you hear, and the shapes flitting everywhere about you; and you may be tempted to give up your study for the very multitude. Get a pair of good field or opera glasses and a good bird book, such as Hoffmann's "Guide to the Birds," and go into the fields and woods — leaving the book at home. The first bird you see follow up until you can remember (1) his size, color — whether he has a white bar on wings, or small spots or large clear spots on breast; (2) his chirp, or call; (3) something peculiar about his flight — a flirt of the tail, a habit of flying down to the ground in getting away. Then come back to

your book and identify him *from memory*. If you cannot, then go out again and again; and it will not be long before either this first one, or others, will be accurately made out — the beginning of an acquaintance that you can extend in the summer, but which will be plenty large enough for your "coming-out" winter into bird society. For here is a list of the birds you may be able to find during the winter: —

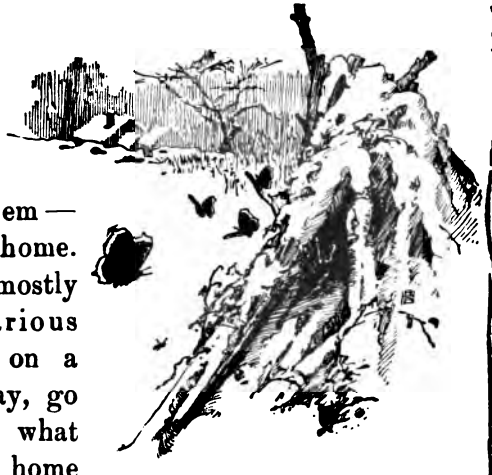
Screech owl, crow, robin, flicker, jay, goldfinch, tree sparrow, English sparrow, song sparrow, junco, golden-crowned kinglet, nuthatch, brown creeper, downy woodpecker, quail, partridge.

V

See to it that no bird in your neighborhood starves for lack of food that you can supply. Tie a piece of suet to a tree or bush near the house (by the window if you can) for the chickadees and blue jays; keep a place on the lawn cleared of snow and well supplied with crumbs and small seeds for the juncos and the sparrows; hang a netted bag of cracked nuts out somewhere for the nuthatches; and provide corn and nuts for the squirrels.

VI

Go out on a cold December day, or a January day, and see how many "signs" of spring — "Minor Prophets," as Mr. Torrey calls them — you can bring home. They will be mostly buds of various sorts. Then, on a warm, soft day, go again to see what you can bring home — flitting, creeping, crawling things that the warm sun has brought from their winter hiding.



VII

Make a map of your sky, showing the positions of the planets, the constellations, and the most brilliant stars, the points in the horizon for the rising and setting of the sun, say, in January, noting the changes in places of things since your last map drawn in October. Any school child can do it, and, in doing it, learn the few large facts about the sky that most people are pitifully ignorant of.

VIII

Go out after a fresh light snow and take up the trail of a fox or a rabbit or a partridge, as you might take up a problem in arithmetic, or as a detective might take up a clew, and "solve" it—where the creature came from, where going, what for, in a hurry or not, pursued or pursuing, etc. It will give you one of the best of lessons in observation, in following a clew, and in learning to take a hint.

IX

Go out to study the face of the ground—the ridges, hollows, level places, the ledges, meadows, sandbanks, the course of the streams, the location of the springs—the general shape and contour, the pitch and slant and make-up of the region over which you tramp in the summer. Now, when the leaves are off and things swept bare, you can get a general idea of the lay of the land that will greatly

aid you in your more detailed study of plants and birds, of individual things, in the summer. It is like an outline map in your geography.

X

Winter is the time to do much good reading. A tramp over real fields is to be preferred to a tramp in a book. But a good book is pretty nearly as good as anything under the stars. You need both fields and books. And during these cold days — impossible days, some of them, for work afield — you will read, read. Oh, the good things to read that have been written about the out-of-doors!

CHAPTER VIII

THE MISSING TOOTH

THE snow had melted from the river meadows, leaving them flattened, faded, and stained with mud—a dull, dreary waste in the gray February. I had stopped beside a tiny bundle of bones that lay in the matted grass a dozen feet from a ditch. Here, still showing, was the narrow path along which the bones had dragged themselves; there the hole by which they had left the burrow in the bank of the ditch. They had crawled out in this old runway, then turned off a little into the heavy autumn grass and laid them down. The rains had come and the winter snows. The spring was breaking now and the small bundle, gently loosened and uncovered, was whitening on the wide, bare meadow.

Shall I stop beside this small bundle of whitening bones or shall I turn my head away and pass on? Shall I allow you to stop with me in our winter ramble and let you see the tragedy here in the flattened meadow grass, or shall I hide from your eyes the dark, the bitter, the tragic in the lives of the wild things out of doors?

I think it is best to hide nothing from you. Real love for nature is largely sympathy with nature; and there can be no sympathy without intimate and full understanding of the struggle and suffering in the lives out of doors. There is a dark story in this little bundle of bones. Do you wish to hear it? There is a fierce, cruel threat in the growl of the winter wind. Do you wish to hear that? There is menace and death in the shrill scream of the hawk. Do you wish to hear that? Or do you wish to hear only the song of the robin? only the whisper of the summer breeze? only the story of the life and love and joy of things?

No, there are two sides to life—two sides to your life, the bright and dark sides; two sides to the lives of all men, and to the lives of all things. Summer is the bright side of Nature's life; winter is the dark side. Summer and winter are both needed to round out the life of the year; so tears and laughter seem to be needed in our lives; joy and sorrow, peace and suffering, rest and hardship—these, or something like them, seem to be needed in the lesser lives of

birds and beasts to round out their experience and make them keen and strong.

Happily, the pain and suffering in nature are largely hidden from us. Wild things when stricken "turn their faces to the wall," retreat, slink silently away out of sight to be alone. They do not wish us to know. But we do know, and we need to know, if we would enter into their lives as a sharer in them; and if we would enter into and understand the larger, wider, deeper life of which they, and we, and all things, are a part.

You must pause with me above this little bundle of bones until I tell you their story.

I had recognized the bones at once as the skeleton of a muskrat. But it was something peculiar in the way they lay that had caused me to pause. They seemed outstretched, as if composed by gentle hands, the hands of sleep. They had not been flung down. The delicate ribs had fallen in, but not a bone was broken nor displaced, not one showed the splinter of shot, or the crack that might have been made by a steel trap. No violence had been done them. They had been touched by nothing rougher than the snow. Out into the hidden runway they had crept. Death had passed by them here; but no one else in all the winter months.

The creature had died — a "natural" death. It had starved, while a hundred acres of plenty lay

round about. Picking up the skull, I found the jaws locked together as if they were a single solid bone. One of the two incisor teeth of the upper jaw was missing, and apparently had never developed. The opposite tooth on the lower jaw, thus unopposed and so unworn, had grown beyond its normal height up into the empty socket above, then on, turning outward and piercing the cheek-bone in front of the eye, whence, curving like a boar's tusk, it had slowly closed the jaws and locked them, rigid, set, as fixed as jaws of stone.

At first the animal had been able to gnaw; but as the tooth curved through the bones of the face and gradually tightened the jaws, the creature got less and less to eat, until, one day, creeping out of the burrow for food, the poor thing was unable to get back.

We seldom come upon the like of this. It is commoner than we think; but, as I have said, it is usually hidden away and quickly over. How often do we see a wild thing sick — a bird or animal suffering from an accident, or dying, like this muskrat, because of some physical defect? The struggle between animals — the falling of the weak as prey to the strong — is ever before us; but this single-handed fight between the creature and Nature is a far rarer, silenter tragedy. Nature is too swift to allow us time for sympathy.

At best there is only a fighting chance in the

meadow. Only strength and craft may win; only those who have all of their teeth. The muskrat with a single missing tooth never enters the real race of life at all. He slinks from some abandoned burrow, and, if the owl and mink are not watching, he dies alone in the grass, and we rarely know.

I shall never forget the impression made upon me by those quiet bones. It was like that made by my first visit to a great city hospital — out of the busy, cheerful street into a surgical ward, where the sick and injured lay in long white lines. We tramp the woods and meadows and never step from the sweet air and the pure sunlight of health into a hospital. But that is not because no sick, ill-formed, or injured are there. The proportion is smaller than among us humans, and for very good reasons, yet there is much real suffering, and to come upon it, as we will, now and then, must certainly quicken our understanding and deepen our sympathy with the life out of doors.

No sensible person could for a moment believe the animals capable of suffering as a human being can suffer; nor that there is any such call for our sympathy from them as from our human neighbors. But an unselfish sharing of the life of the fields demands that we take part in all of it.

Nature wears a brave face. Her smile is ever in the open, her laughter quick and contagious. This brave front is no mask. It is real. Sunlight, song,

color, form, and fragrance are real. And so is our love and joy in Nature real. Real, also, should be our sympathy and sorrow with Nature.

Here, for instance, are my crows: do I share fully in the life of Nature so long as I think of the crow only with admiration for his cunning or with wrath at his destruction of my melons and corn?

A crow has his solemn moments. He knows fear, pain, hunger, accident, and disease; he knows something very like affection and love. For all that, he is a mere crow. But a mere crow is no mean thing. He is my brother, and a real love will give me part in all his existence. I will forage and fight with him; I will parley and play; and when the keen north winds find him in the frozen pines, I will suffer with him, too.

Here again are my meadow voles. I know that my hay crop is shorter every year for them, — a very little shorter. And I can look with satisfaction at a cat carrying a big bob-tailed vole out of my "mowing," for the voles, along with other mice, are injurious to man.

But one day I came upon two of my voles struggling for life in the water, exhausted and well-nigh dead. I helped them out, as I should have helped out any other creature, and having saved

them, why, what could I do but let them go — even into my own meadow? This has happened several times.

When the drought dries the meadow, the voles come to the deep, plank-walled spring at the upper end, to drink. The water usually trickles over the curb, but in a long dry spell it shrinks to a foot or more below the edge, and the voles, once within for their drink, cannot get out. Time and again I had fished them up, until I thought to leave a board slanting down to the water, so that they could climb back to the top.

It is wholesome to be the good Samaritan to a meadow mouse, to pour out, even waste, a little of the oil and wine of sympathy on the humblest of our needy neighbors.

Here are the chimney swallows, too. One can look with complacency, with gratitude, indeed, upon the swallows of other chimneys, as they hawk in the sky; yet, when the little creatures, so useful, but so uncombed and unfumigated, set up their establishments in *your* chimney, to the jeopardy of the whole house, then you need an experience like mine.

I had had a like experience years before, when the house did not belong to me. This time, however, the house was mine, and if it became infested with vermin because of the swallows, I could not move away; so I felt like burning them in the chimney, bag and baggage. There were four nests, as

nearly as I could make out, and, from the frequent squeakings, I knew they were all filled with young. Then one day, when the young were nearly ready to fly, there came a rain that ran wet far down the sooty chimney, loosened the mortar of the nests, and sent them crashing into the fireplace.

Some of the young birds were killed outright; the others were at my mercy, flung upon me,—helpless, wailing infants! Of course I made it comfortable for them on the back-log, and let their mothers flutter down unhindered to feed them. Had I understood the trick, I would have hawked for them and helped feed them myself!

They made a great thunder in the chimney; they rattled down into the living-room a little soot; but nothing further came of it. We were not quarantined. On the contrary, we had our reward, according to promise; for it was an extremely interesting event to us all. It dispelled some silly qualms, it gave us intimate part in a strange small life, so foreign, yet so closely linked to our own; and it made us pause with wonder that even our empty, sooty chimney could be made use of by Nature to our great benefit.

I wonder if the nests of the chimney swallows came tumbling down when the birds used to build in caves and hollow trees? It is a most extraordinary change, this change from the trees to the chimneys, and it does not seem to have been accompanied by

an increase of architectural wisdom necessary to meet all the conditions of the new hollow. The mortar or glue, which, I imagine, held firmly in the empty trees, will not mix with the chimney soot, so that the nest, especially when crowded with young, is easily loosened by the rain, and sometimes even broken away by the slight wing stroke of a descending swallow, or by the added weight of a parent bird as it settles with food.

We little realize how frequent fear is among the birds and animals, and how often it proves fatal. A situation that would have caused no trouble ordinarily, becomes through sudden fright a tangle or a trap. I have known many a quail to bolt into a fast express train and fall dead. Last winter I left the large door of the barn open, so that my flock of juncos could feed inside upon the floor. They found their way into the hayloft and went up and down freely. On two or three occasions I happened in so suddenly that they were thoroughly frightened and flew madly into the cupola to escape through the windows. They beat against the glass until utterly dazed, and would have perished there, had I not climbed up later and brought them down. So thousands of the migrating birds perish yearly by flying wildly against the dazzling lanterns of the lighthouses, and thousands more either lose their course in the thick darkness of the stormy nights, or else are blown out of it, and drift far away to sea.

Hasty, careless, miscalculated movements are not as frequent among the careful wild folk as among us, perhaps; but there is abundant evidence of their occasional occurrence and of their sometimes fatal results.

Several instances are recorded of birds that have been tangled in the threads of their nests; and one instance of a bluebird that was caught in the flying meshes of an oriole's nest into which it had been spying.

I once found the mummied body of a chippy twisting and swinging in the leafless branches of a peach tree. The little creature was suspended in a web of horsehair about two inches below a nest. It looked as if she had brought a snarled bunch of the hair and left it loose in the twigs. Later on, a careless step and her foot was fast, when every frantic effort for freedom only tangled her the worse. In the nest above were four other tiny mummies — a double tragedy that might with care have been averted.

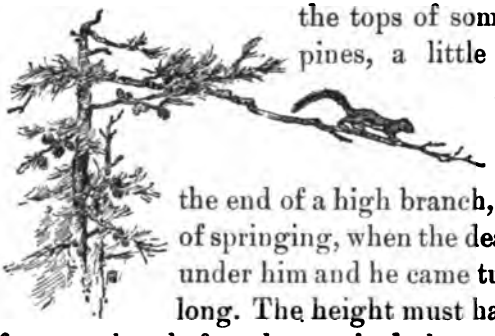
A similar fate befell a song sparrow that I discovered hanging dead upon a barbed-wire fence. By some chance it had slipped a foot through an open place between the two twisted strands, and then, fluttering along, had wedged the leg and broken it in the struggle to escape.

We have all held our breath at the hazardous traveling of the squirrels in the treetops. What

other animals take such risks? — leaping at dizzy heights from bending limbs to catch the tips of limbs still smaller, saving themselves again and again by the merest chance.

But luck sometimes fails. My brother, a careful watcher in the woods, on one occasion when he was hunting, saw a gray squirrel miss its footing in a tree and fall, breaking its neck upon a log beneath.

I have frequently known squirrels to fall short distances, and once I saw a red squirrel come to grief like this gray squirrel. He was scurrying through the tops of some lofty pitch pines, a little hurried and flustered at sight of me, and, nearing the end of a high branch, was in the act of springing, when the dead tip cracked under him and he came tumbling headlong. The height must have been forty feet, so that before he reached the ground he had righted himself, — his tail out and legs spread, — but the fall was too great. He hit the earth heavily, and before I could reach him he lay dead upon the needles, with blood oozing from his eyes and nostrils.



Unhoused and often unsheltered, the wild things suffer as we hardly yet understand. No one can estimate how many of our wild creatures die in a year

from severe cold, heavy storms, high winds and tides. I have known the nests of a whole colony of gulls and terns to be swept away in a great storm; while the tides, over and over, have flooded the inlet marshes and drowned out the nests in the grass — those of the clapper rails by thousands.

I remember a late spring storm that came with the returning redstarts and, in my neighborhood, killed many of them. Toward evening of that day one of the little black-and-orange voyageurs fluttered against the window and we let him in, wet, chilled, and so exhausted that for a moment he lay on his back in my open palm. Soon after there was another soft tapping at the window, — and *two* little redstarts were sharing our cheer and drying their butterfly wings in our warmth. Both of these birds would have perished had we not harbored them for the night.

The birds and animals are not as weather-wise as we; they cannot foretell as far ahead nor provide as certainly against need, despite the popular notion to the contrary.

We point to the migrating birds, to the muskrat houses, to the hoards of the squirrels, and say, "How wise and far-sighted these Nature-taught children are!" True, they are, but only for conditions that are normal. Their wisdom does not cover the unusual. The gray squirrels did not provide for the unusually hard weather of last winter. Three of them

from the woodlot came begging of me, and lived on my wisdom, not their own.

Consider the ravens, that neither sow nor reap, that have neither storehouse nor barn, yet they are fed — but not always. Indeed, there are few of our winter birds that go hungry so often as do the cousins of the ravens, the crows, and that die in so great numbers for lack of food and shelter.

After severe and protracted cold, with a snow-covered ground, a crow-roost looks like a battlefield, so thick lie the dead and wounded. Morning after morning the flock goes over to forage in the frozen fields, and night after night returns hungrier, weaker, and less able to resist the cold. Now, as the darkness falls, a bitter wind breaks loose and sweeps down upon the pines.

> "List'ning the doors an' winnocks rattle,
> I thought me on the ourie cattle," —

and how often I have thought me of the crows biding the night yonder in the moaning pines! So often, as a boy, and with so real an awe, have I watched them returning at night, that the crows will never cease flying through my wintry sky, — an endless line of wavering black figures, weary, retreating figures, beating over in the early dusk.

And to-night another wild storm sweeps across the winter fields. All the afternoon the crows have been going over, and are still passing as the darkness settles at five o'clock. Now it is nearly eight, and the

long night is but just begun. The storm is increasing. The wind shrieks about the house, whirling the fine snow in hissing eddies past the corners and driving it on into long, curling crests across the fields. I can hear the roar as the wind strikes the shoal of pines where the fields roll into the woods —a vast surf sound, but softer and higher, with a wail like the wail of some vast heart in pain.

I can see the tall trees rock and sway with their burden of dark forms. As close together as they can crowd on the bending limbs cling the crows, their breasts turned all to the storm. With crops empty and bodies weak, they rise and fall in the cutting, ice-filled wind for thirteen hours of night.

Is it a wonder that the life fires burn low? that sometimes the small flames flicker and go out?

CHAPTER IX

THE PECULIAR 'POSSUM

IF you are a New Englander, or a Northwesterner, then, probably, you have never pulled a 'possum out of his hollow stump or from under some old rail-pile, as I have done, many a time, down in southern New Jersey. And so, probably, you have never made the acquaintance of the most peculiar creature in our American woods.

Even roast 'possum is peculiar. Up to the time you taste roast 'possum you quite agree with Charles Lamb that roast pig is peculiarly the most delicious delicacy "in the whole *modus edibilis*," in other words, bill of fare. But once you eat roast 'possum, you will go all over Lamb's tasty "Dissertation upon Roast Pig," marking out "pig" with your pencil and writing in "'possum," making the essay read thus: —

"There is no flavor comparable, I will contend, to that of the crisp, tawny, well-watched, not overroasted, *'possum*, as it is called, — the very teeth are invited to their share of the pleasure at this banquet in overcoming the coy, brittle resistance, — with the adhesive oleaginous — O call it not fat! but an indefinable sweetness growing up to it — the

tender blossoming of fat — fat cropped in the bud — taken in the shoot — in the first innocence —" For no matter how old your roast 'possum, he is as tender as the tenderest roast pig. And that, of course, is peculiar.

But live 'possum is more peculiar than roast 'possum. It is peculiar, for instance, that almost all of the 'possum's relations, except his immediate family, dwell apart in Australia, — in Australasia, for marsupials are found also in Tasmania, New Guinea, and the Moluccas — which islands the marsupials seem to have had given them for their own when the world was made. There, at least, most of them live and have lived for ages, except the 'possums. These latter, strangely enough, live in South and North America, and nowhere else. The peculiar, puzzling thing about them is: how they, and they only of the marsupials, got away from Australia across the sea to America. Did a family of them get set adrift on a log and float across? Or was there once, as geologists tell us, a long string of islands close together, stretching from the tip of South America, from the "Horn," off across the sea to Australia, over which the 'possums might once have made their way? But if they came by such a route, why did not the kangaroos come too? Ah, the kangaroo is not a 'possum. There is no other creature in the woods that would dare play "Follow the leader" with the 'possum. No, I am half inclined to

think the scientists right who say that the 'possum is the great-great-grandfather of all the marsupials, and that the migration might have been the other way about — from America, across the sea.

But what is the use of speculating? Here is the 'possum in our woods; that we know; and yonder in Australasia are his thirteen sets of cousins, and there they seem always to have been, for of these thirteen sets of cousins, four sets have so long since ceased to live that they are now among the fossils, slowly turning, every one of them, to stone!

A queer history he has, surely! But queerer than his history, is his body, and the way he grows from babyhood to twenty-pound 'possumhood.

For besides having a tail that can be used for a hand, and a paw with a thumb like the human thumb, the female 'possum has a pocket or pouch on her abdomen, just as the kangaroo has, in which she carries her young.

Now that is peculiar, so very peculiar when you study deeply into it, that the 'possum becomes to the scientist quite the most interesting mammal in North America.

Returning from a Christmas vacation one year, while a student in college, I brought back with me twenty-six live 'possums so that the professor of zoölogy could study the peculiar anatomy of the 'possum for several of its many meanings.

This pouch, for instance, and the peculiar bones

of the 'possum, show that it is a very primitive mammal, one of the very oldest mammals, so close to the beginning of the mammalian line that there are only two other living "animals" (we can hardly

call them mammals) older and more primitive — the porcupine ant-eater, and, oldest of all, the duck-bill, not "older" at all perhaps, but only more primitive.

For the duck-bill, though classed as a mammal, not only has the bill of the duck, but also lays eggs like the birds. The porcupine ant-eater likewise lays eggs, and so seems almost as much bird or reptile as mammal. And as the birds and reptiles lived upon the earth before the age of mammals, and are a lower and more primitive order of creatures, so the duck-bill, the porcupine ant-eater, and the 'possum, because in their anatomy they are like the birds

and the reptiles in some respects, are perhaps the lowest and the oldest of all the mammals.

The 'possum, therefore, is one of the most primitive of mammals, and dates as far back as the reptilian age, when only traces of mammalian life are to be found, the 'possum's fossil ancestors being among the notable of these early remains.

The mammals at that time, as I have just said, were only partly mammal, for they were partly bird or reptile, as the duck-bill and ant-eater still are. Now the 'possum does not lay eggs as these other two do, for its young are born, not hatched; yet so tiny and undeveloped are they when born, that they must be put into their mother's pouch and nursed, as eggs are put into a nest and brooded until they are hatched — really born a second time.

For here in their mother's pouch they are like chicks in the shell, and quite as helpless. It is five weeks before they can stick their heads out and take a look at the world.

No other mammalian baby is so much of a baby and yet comes so near to being no baby at all. It is less than an inch long when put into the pouch, and it weighs only four grains! Four grains? Think how

small that is. For there are 7000 grains to a pound, which means that it would take 1750 baby 'possums to weigh as much as two cups of sugar!

"I should say he was peculiar!" I hear you exclaim; and you will agree with an ancient History of Carolina which I have, when it declares: "The Opossom is the wonder of all the land animals."

I wish you had been with me one spring day as I was stretching a "lay-out" line across Cubby Hollow. (A lay-out line is a long fish-line, strung with baited hooks, and reaching across the pond from shore to shore.) I was out in the middle of the pond, lying flat on a raft made of three cedar rails, when my dog began to bark at something in a brier-patch on shore.

Paddling in as fast as I could, I found the dog standing before a large 'possum, which was backed up against a tree.

I finally got Mrs. 'Possum by the tail and dropped her unhurt into my eel-pot—a fish-trap made out of an empty nail-keg—which I had left since fall among the bushes of the hillside. Then paddling again to the middle of the pond, I untangled and set my hooks on the lay-out line, and came back to shore for my 'possum.

I didn't quite fancy pushing my hand down through the burlap cover over the end of the keg; so I turned it upside down to spill the 'possum out,

— and out she spilled and nine little 'possums with her!

I had put in one and spilled out — ten! And this proves again that the 'possum is peculiar. Nine of these were babies that had been hidden from me and the dog in their mother's pouch.

Peculiar, too, was the history of one of these nine young 'possums (the one we named "Pinky"). For after Pinky's mother choked to death on a fish-bone, I gave all his brothers and sisters away, and devoted myself to training Pinky up in the way he should go. And strangely enough, when

he was grown, unlike any other wild animal I had ever tamed, he would not depart from these domesticated ways, but insisted upon coming back home every time I took him away to the woods. Of course he was only a few months old when I tried to turn him loose in the woods, and that may account for his returning and squeezing through the opening of the pump-box trough into the kitchen and going fast asleep on the cushion of the settee; as it may also account for his getting into a neighbor's yard by mistake on his way back one night and drowning in the well.

You have read of 'possum hunts; — and they are peculiar, too, as naturally they must needs be. For you hunt 'possums with rabbit hounds, and shoot them with a meal-sack — shoot them *into* a meal-sack would be more exact. And you hunt by moonlight if you really love 'possum.

We used to start out just as the moon, climbing over the woods, fell soft across the bare fields. The old dog would be some distance ahead, her nose to the ground, sometimes picking up a trail in the first corn-field, or again not until we reached the woods, or again leading us for miles along the creek meadows among the scattered persimmon trees, before striking a fresh scent.

Wherever the trail started it usually led away for the woods, for some hollow stump or tree, where the 'possum made his nest. Once in a while I have over-

taken the fat fellow in an open field or atop a fence, or have even caught him in a hencoop; but usually, if hunting at night, it has been a long, and not always an easy, chase, for a 'possum, in spite of his fat and his fossil ancestors, is not stupid. Or else he is so slow-witted that there is no telling, by man or dog, which way he will go, or what he may do next.

A rabbit, or a deer, or a coon, when you are on their trail, will do certain things. You can count upon them with great certainty. But a 'possum never seems to do anything twice alike; he has no traveled paths, no regular tricks, no set habits. He knows the road home, but it is always a different road — a meandering, roundabout, zigzag, criss-cross, up-and-down (up-the-trees-and-down) road, we-won't-get-home-till-morning road, that takes in all the way stations, from the tops of tall persimmon trees to the bottoms of all the deep, dark holes that need looking into, along the route.

Peculiar! — So, at least, a dog with an orderly mind and well-regulated habits thinks, anyhow. For a 'possum trail will give a good rabbit dog the blues; he has n't the patience for it. Only a slow rheumatic old hound will stick to a 'possum trail with the endurance necessary to carry it to its end — in a hollow log, or a hollow stump, or under a shock of corn or a rail-pile. Once the trail actually led me, after much trouble, into a hen-house and

into a stove in the hen-house, where, upon the grate, I found three 'possums in their nest!

It is a peculiar sport, this 'possum-hunting; yet it is mildly exciting; and when you get your 'possum by the tail, he smiles at you — grins, I ought to say — and has a fit. To go hunting for a creature that smiles at you in a dreadful manner when you capture him, that flops down in a dead faint or has a fit when you take him up by the tail, that shows the spunk and fight of a boiled cabbage — to go hunting for such a beast must be exciting, as exciting as going to the store for a quart of beans.

But here are the winter woods at night, and the wide, moonlit fields, covered, it may be, with the glistening snow. The full, round moon rides high overhead, the pointed corn-shocks stand silent over the fields, the woods rise dark and shadowy beyond. Only the slow, musical cry of the hound echoes through the stirless air, which seems to sparkle like the snow, as if filled with gleaming frost-dust that only the moonlight can catch and set to glancing silvery-bright.

You don't care whether you catch a 'possum or not; you are abroad in a world so large and silent, so crystal-clear and shining, so crisp, so open, so acreep with shadows, so deep and mysterious in its distances, so pure and beautiful and unblemished, that just to be abroad is wonder enough, and you are not sorry to come back under the brilliant mid-

night sky with the old dog at your heels and over your shoulder an empty bag.

But if your bag is heavy with fat 'possum then that, too, is good. You have peered into his black hole; you have reached in and pulled him out — nothing more. No roar of a gun has shattered your world of crystal; you have killed nothing, wounded nothing — no, not even the silence and the serenity of your soul. You and the clear, calm night are still one.

You have dropped a smiling 'possum into an easy, roomy bag. He feels warm against your back. The old dog follows proud and content at your heels. And you feel — as the wide, softly shining sky seems to feel.

And that, too, is peculiar.

CHAPTER X

A FEBRUARY FRESHET

ONE of the very interesting events in my out-of-door year is the February freshet. Perhaps you call it the February *thaw*. That is all it could be called this year; and, in fact, a *thaw* is all that it ever is for me, nowadays, living, as I do, high and dry here, on Mullein Hill, above a sputtering little trout brook that could not have a freshet if it tried.

But Maurice River could have a freshet without trying. Let the high south winds, the high tides, and the warm spring rains come on together, let them drive in hard for a day and a night, as I have known them to do, and the deep, dark river goes mad! The tossing tide sweeps over the wharves, swirls about the piles of the great bridge, leaps foaming into the air, and up and down its long high banks beats with all its wild might to break through into the fertile meadows below.

There are wider rivers, and other, more exciting things, than spring freshets; but there were not when I was a boy. Why, Maurice River was so wide that there was but a single boy in the town, as I remember, who could stand at one end of the draw-

bridge and skim an oyster-shell over to the opposite end! The best that I could do was to throw my voice across and hear it echo from the long, hollow barn on the other bank. It would seem to me to strike the barn in the middle, leap from end to end like a creature caged, and then bound back to me faint and frightened from across the dark tide.

I feared the river. Oh, but I loved it, too. Its tides were always rising or falling — going down to the Delaware Bay and on to the sea. And in from the bay, or out to the bay, with white sails set, the big boats were always moving. And when they had gone, out over the wide water the gulls or the fish

hawks would sail, or a great blue heron, with wings like the fans of an old Dutch mill, would beat ponderously across.

I loved the river. I loved the sound of the calking-maul and the adze in the shipyard, and the smell of the chips and tarred oakum; the chatter of

the wrens among the reeds and calamus; the pink of the mallow and wild roses along the high mud banks; the fishy ditches with their deep sluiceways through the bank into the river; and the vast, vast tide-marshes that, to this day, seem to me to stretch away to the very edge of the world.

What a world for a boy to drive cows into every morning, and drive them home from every night, as I used to help do! or to trap muskrats in during the winter; to go fishing in during the summer; to go splashing up and down in when the great February freshet came on!

For of all the events of the year, none had such fascination for me as the high winds and warm downpour that flooded the wharves, that drove the men of the village out to guard the river-banks, and that drowned out of their burrows and winter hiding-places all the wild things that lived within reach of the spreading tide.

The water would pour over the meadows and run far back into the swamps and farm lands, setting everything afloat that could float — rails, logs, branches; upon which, as chance offered, some struggling creature would crawl, and drift away to safety.

But not always to safety; for over the meadows the crows and fish hawks, gulls, herons, bitterns, and at night the owls, were constantly beating to pounce upon the helpless voyagers, even taking the

muskrats an easy prey, through their weakness from exposure and long swimming in the water.

There would be only two shores to this wild meadow-sea — the river-bank, a mere line of earth drawn through the water, and the distant shore of the upland. If the wind blew from the upland toward the bank, then the drift would all set that way, and before long a multitude of shipwrecked creatures would be tossed upon this narrow breakwater, that stood, a bare three feet of clay, against the wilder river-sea beyond.

To walk up and down the bank then was like entering a natural history museum where all the specimens were alive; or like going to a small menagerie. Sparrows, finches, robins, mice, moles, voles, shrews, snakes, turtles, squirrels, muskrats, with even a mink and an opossum now and then, would scurry from beneath your feet or dive back into the water as you passed along.

And by what strange craft they sometimes came! I once saw two muskrats and a gray squirrel floating along on the top of one of the muskrats' houses. And again a little bob-tailed meadow mouse came rocking along in a drifting catbird's nest which the waves had washed from its anchorage in the rose-bushes. And out on the top of some tall stake, or up among the limbs of a tree you would see little huddled bunches of fur, a muskrat perhaps that had never climbed before in his life, waiting,

like a sailor lashed to the rigging, to be taken off.

But it was not the multitude of wild things — birds, beasts, insects — that fascinated me most, that led me out along the slippery, dangerous bank through the swirling storm; it was rather the fear and confusion of the animals, the wild giant-spirit

raging over the face of the earth and sky, daunting and terrifying them, that drew me.

Many of the small creatures had been wakened by the flood out of their deep winter sleep, and, dazed and numbed and frightened, they seemed to know nothing, to care for nothing but the touch of the solid earth to their feet.

All of their natural desires and instincts, their hatreds, hungers, terrors, were sunk beneath the waters. They had lost their wits, like human creatures in a panic, and, struggling, fighting for a foothold, they did not notice me unless I made at them, and then only took to the water a moment to escape the instant peril.

The sight was strange, as if this were another planet and not our orderly, peaceful world at all. Nor, indeed, was it; for fear cowered everywhere, in all the things that were of the earth, as over the earth and everything upon it raged the fury of river and sky.

The frail mud bank trembled under the beating of the waves; the sunken sluices strangled and shook deep down through the whirlpools sucking at their mouths; the flocks of scattered sea-birds — ducks and brant — veered into sight, dashed down toward the white waters or drove over with mad speed, while the winds screamed and the sky hung black like a torn and flapping sail.

And I, too, would have to drop upon all fours, with the mice and muskrats, and cling to the bank for my life, as the snarling river, leaping at me, would plunge clear over into the meadow below.

A winter blizzard is more deadly, but not more fearful, nor so wild and tumultuous. For in such a storm as this the foundations of the deep seem to be broken up, the frame of the world shaken, and you, and the mice, and the muskrats, share alike the wild, fierce spirit and the fear.

To be out in such a storm, out where you can feel its full fury, as upon a strip of bank in the midst of the churning waters, is good for one. To experience a common peril with your fellow mortals, though they be only mice and muskrats, is good for one;

for it is to share by so much in their humble lives, and by so much to live outside of one's own little self.

And then again, we are so accustomed to the order and fair weather of our part of the globe, that we get to feel as if the universe were being particularly managed for us; nay, that we, personally, are managing the universe. To flatten out on a quaking ridge of earth or be blown into the river; to hear no voice but the roar of the storm, and to have no part or power in the mighty tumult of such a storm, makes one feel about the size of a mouse, makes one feel how vast is the universe, and how fearful the vortex of its warring forces!

The shriek of those winds is still in my ears, the sting of the driving rains still on my face, the motion of that frail mud bank, swimming like a long sea-serpent in the swirling waters, I can still feel to my finger-tips. And the growl of the river, the streaming shreds of the sky, the confusion beneath and about me, the mice and muskrats clinging with me for a foothold — I live it all again at the first spatter of a February rain upon my face.

To be out in a February freshet, out in a big spring break-up, is to get a breaking up one's self, a preparation, like Nature's, for a new lease of life — for spring.

CHAPTER XI

A BREACH IN THE BANK

THE February freshet had come. We had been expecting it, but no one along Maurice River had ever seen so wild and warm and ominous a spring storm as this. So sudden and complete a break-up of winter no one could remember; nor so high a tide, so rain-thick and driving a south wind. It had begun the night before, and now, along near noon, the river and meadows were a tumult of white waters, with the gale so strong that one could hardly hold his own on the drawbridge that groaned from pier to pier in the grip of the maddened storm.

It was into the teeth of this gale that a small boy dressed in large yellow "oil-skins" made his slow way out along the narrow bank of the river toward the sluices that controlled the tides of the great meadows.

The boy was *in* the large yellow oil-skins; not dressed, no, for he was simply inside of them, his feet and hands and the top of his head having managed to work their way out. It seems, at least, that his head was partly out, for on the top of the oil-skins sat a large black sou'wester. And in the

arms of the oil-skins lay an old army musket, so big and long that it seemed to be walking away with the oil-skins, as the oil-skins seemed to be walking away with the boy.

I can feel the kick of that old musket yet, and the prick of the dried sand-burs among which she knocked me. I can hear the rough rasping of the chafing legs of those oil-skins too, though I was not the boy this time inside of them. But I knew the boy who was, a real boy; and I know that he made his careful way along the trembling river-bank out into the sunken meadows, meadows that later on I saw the river burst into and claim — and it still claims them, as I saw only last summer, when after thirty years of absence I once more stood at the end of that bank looking over a watery waste which was once the richest of farm lands.

Never, it seemed, had the village known such wind and rain and such a tide. It was a strange, wild scene from the drawbridge — wharves obliterated, river white with flying spume and tossing ice-cakes, the great bridge swaying and shrieking in the wind, and over everything the blur of the swirling rain.

The little figure in yellow oil-skins was not the only one that had gone along the bank since morning, for a party of men had carefully inspected every foot of the bank to the last sluice, for fear that there might be a weak spot somewhere. Let a

breach occur with such a tide as this and it could never be stopped.

And now, somewhat past noon, the men were again upon the bank. As they neared Five-Forks sluice, the central and largest of the water-gates, they heard a smothered *boom* above the scream of the wind in their ears. They were startled; but it was only the sound of a gun somewhere off in the meadow. It was the gun of the boy in the oil-skins.

Late that afternoon Doctor "Sam," driving home along the flooded road of the low back swamp,

caught sight, as he came out in view of the river, of a little figure in yellow oil-skins away out on the meadow.

The doctor stopped his horse and hallooed. But

the boy did not hear. The rain on his coat, the wind and the river in his ears drowned every other sound.

The dusk was falling, and as the doctor looked out over the wild scene, he put his hands to his mouth and called again. The yellow figure had been blotted out by the rain. There was no response, and the doctor drove on.

Meanwhile the boy in the yellow oil-skins was splashing slowly back along the narrow, slippery clay bank. He was wet, but he was warm, and he loved the roar of the wind and the beat of the driving rain.

As the mist and rain were fast mixing with the dusk of the twilight, he quickened his steps. His path in places was hardly a foot wide, covered with rose and elder bushes mostly, but bare in spots where holes and low worn stretches had been recently built up with cubes of the tough blue mud of the flats.

The tide was already even with the top of the bank and was still rising. It leaped and hit at his feet as he picked his way along. The cakes of white ice crunched and heeled up against the bank with here and there one flung fairly across his path. The tossing water frequently splashed across. Twice he jumped places where the tide was running over down into the meadows below.

How quickly the night had come! It was dark

when he reached Five-Forks sluice — the middle point in the long, high bank. While still some distance off he heard the sullen roar of the big sluice, through which the swollen river was trying to force its way.

He paused to listen a moment. He knew the peculiar voice of every one of these gateways, as he knew every foot of the river-bank.

There was nothing wrong with the sullen roar. But how deep and threatening! He could *feel* the sound even better than he could hear it, far down below him. He started forward, to pass on, when he half felt, through the long, regular throbbing of the sluice, a shorter, faster, closer quiver, as of a small running stream in the bank very near his feet.

Dropping quickly to his knees, he laid his ear to the wet earth. A cold, black hand seemed to seize upon him. He heard the purr of running water!

It must be down about three feet. He could distinctly feel it tearing through.

Without rising he scrambled down the meadow side of the bank to see the size of the breach. He could hear nothing of it for the boiling at the gates of the sluice. It was so dark he could scarcely see. But near the bottom the mud suddenly caved beneath his feet, and a rush of cold water caught at his knees.

The hole was greater than he feared.

Crawling back to the top of the bank, he leaned out over the river side. A large cake of ice hung in

water in front of him. He pushed it aside and, bending until his face barely cleared the surface of the river, he discovered a small sucking eddy, whose swirling hole he knew ran into the breach.

He edged farther out and reached down under the water and touched the upper rim of the hole. How large might it be? Swinging round, he dug his fingers into the bank and lowered himself feet first until he stood in the hole. It was the size of a small bucket, but he could almost feel it going beneath his feet, and a sudden terror took hold upon him.

He was only a boy, and the dark night, the wild river, the vast, sweeping storm, the roar and tremor and tumult flattened him for a moment to the ridge of the bank in a panic of fear!

But he heard the water running, he felt the bank going directly beneath where he lay, and getting to his feet he started for the village. A single hasty step and, but for the piles of the sluice, he would have plunged into the river.

He must feel his way; but he never could do it in time to save the bank. The breach must be stopped at once. He must stop it and keep it stopped until the next patrol brought help.

Feeling his way back, he dropped again upon his hands and knees above the breach to think for a moment. The cake of ice hung as before in the eddy. Catching it, he tipped it and thrust it down across the mouth of the hole, but it slipped from his cold

fingers and dived away. He pushed down the butt of his musket, turned it flat, but it was not broad enough to cover the opening. Then he lowered himself again, and stood in it, wedging the musket in between his boots; but he could feel the water still tearing through at the sides, and eating all the faster.

He clambered back to the top of the bank, put his hand to his mouth and shouted. The only answer was the scream of the wind and the cry of a brant passing overhead.

Then the boy laughed. "Easy enough," he muttered, and, picking up the musket, he leaned once more out over the river and thrust the steel barrel of the gun hard into the mud just below the hole. Then, stepping easily down, he sat squarely into the breach, the gun like a stake in front of him sticking up between his knees.

Then he laughed again, as he caught his breath, for he had squeezed into the hole like a stopper into a bottle, his big oil-skins filling the breach completely.

The water stood above the middle of his breast, and the tide was still rising. Darkness had now settled, but the ghostly ice-cakes, tipping, slipping toward him, were spectral white. He had to shove them back as now and then one rose before his face. The sky was black, and the deep water below him was blacker. And how cold it was!

Doctor Sam had been stopped by the flooded roads on his way home, and lights shone in the windows as he entered the village. He turned a little out of his way and halted in front of a small cottage near the bridge.

"Is Joe here?" he asked.

"No," answered the mother; "he went down the meadow for muskrats and has not returned yet. He 's probably over with the men at the store."

Doctor Sam drove on to the store.

There was no boy in yellow oil-skins in the store.

Doctor Sam picked up a lighted lantern.

"Come on," he said; "I 'm wet, but I want a look at those sluices," and started for the river, followed immediately by the men, whom he led in single file out along the bank.

Swinging his lantern low, he pushed into the teeth of the gale at a pace that left the line of lights straggling far behind.

"What a night!" he growled. "If I had a boy of my own —" and he threw the light as far as he could over the seething river and then down over the flooded meadow.

Ahead he heard the roar of Five-Forks sluice, and swung his lantern high, as if to signal it, so like the rush of a coming train was the sound of the waters.

But the little engineer in yellow oil-skins could not see the signal. He had almost ceased to watch. With his arm cramped about his gun, he was still

at his post; but the ice-cakes floated in and touched him; the water no longer felt cold.

On this side, then on that, out over the swollen river, down into the tossing meadow flared the lantern as the doctor worked his way along.

Above the great sluice he paused a moment, then bent his head to the wind and started on, when his foot touched something soft that yielded strangely, sending a shiver over him, and his light fell upon a bunch of four dead muskrats lying in the path.

Along the meadow side flashed the lantern, up and over the river side, and Doctor Sam, reaching quickly down, drew a limp little form in yellow oil-skins out of the water, as the men behind him came up.

A gurgle, a hiss, a small whirlpool sucking at the surface, — and the tide was again tearing through the breach that the boy had filled.

The men sprang quickly to their task, and did it well, while Doctor Sam, shielding the limp little form from the wind, forced a vial of something between the white lips, saying over to himself as he watched the closed eyes open, "If I had a boy of my own — If I had a boy —"

. . . . . .

No, Doctor Sam never had a boy of his own; but he always felt, I think, that the boy of those yellow oil-skins was somehow pretty nearly his.

. . . . . .

After a long, cold winter how I love the spatter on

"DREW A LIMP LITTLE FORM OUT OF THE WATER"

my face of the first February rain! The little trout brook below me foams and sometimes overruns the road, and as its small noise ascends the hill, I can hear — the wind on a great river, the wash of waves against a narrow bank, and the muffled roar of quaking sluices as when a February freshet is on.

first snowflakes hitting the brown leaves on a forest floor; then the fine sharp scratch of a curled and toothed beech leaf skating before a noiseless breath of wind over the crusty snow. Only he that hath ears will hear these sounds, speaking, as they do, for the vast voiceless moments of the winter world.

VI

I have not heard the "covey call" of the quail this winter. But there is not a quail left alive in all the fields and sprout-lands within sound of me. I used to hear them here on Mullein Hill; a covey used to roost down the wooded hillside in front of the house; but even they are gone — hunted out of life; shot and eaten off of my small world. What a horribly hungry animal man is!

But you may have the quail still in your fields. If so, then go out toward dusk on a quiet, snowy day, especially if you have heard shooting in the fields that day, and try to hear some one of the covey calling the flock together: *Whir-r-rl-ee! Whir-r-rl-ee! Whirl-ee-gee!* — the sweetest, softest, tenderest call you will ever hear!

VII

And you certainly do have chickadees in your woods. If so, then go out any time of day, but go on a cold, bleak, blustery day, when everything is

a-shiver, and, as Uncle Remus would say, "meet up" with a chickadee. It is worth having a winter, just to meet a chickadee in the empty woods and hear him call — a little pin-point of live sound, an undaunted, unnumbed voice interrupting the thick jargon of the winter to tell you that all this bluster and blow and biting cold can't get at the heart of a bird that must weigh, all told, with all his winter feathers on, fully — an ounce or two!

VIII

And then the partridge — you must hear him, bursting like a bottled hurricane from the brown leaves at your feet!

IX

Among the sweet winter sounds, that are as good to listen to as the songs of the summer birds, you should hear: the loud joyous cackling of the hens on a sunny January day; the munching of horses at night when the wild winds are whistling about the barn; the quiet hum about the hives,—

"When come the calm mild days, as still such days will come,
To call the squirrel and the bee from out their winter home."

And then, the sound of the first rain on the shingles — the first February rain after a long frozen period! How it spatters the shingles with *spring — spring — spring!*

"ONE OF THE COVEY CALLING THE FLOCK TOGETHER"

X

It was in the latter end of December, upon a gloomy day that was heavy with the oppression of a coming storm. In the heart of the maple swamp all was still and cold and dead. Suddenly, as out of a tomb, I heard the small, thin cry of a tiny tree-frog. And how small and thin it sounded in the vast silences of that winter swamp! And yet how clear and ringing! A thrill of life tingling out through the numb, nerveless body of the woods that has ever since made a dead day for me impossible.

Have you heard him yet?

XI

"After all," says some one of our writers, "it is only a matter of which side of the tree you stand on, whether it is summer or winter." Just so. But, after all, is it not a good thing to stand on the winter side during the winter? to have a winter while we have it, and then have spring? No shivering around on the spring side of the tree for me. I will button up my coat, brace my back against the winter side and shout to the hoary old monarch —

"And there 's a hand, my trusty fiere,
And gie 's a hand o' thine;"

and what a grip he has!

CHAPTER XIII

THE LAST DAY OF WINTER

ACCORDING to the almanac March 21st is the last day of winter. The almanac is not always to be trusted — not for hay weather, or picnic weather, or sailing weather; but you can always trust it for March 21st weather. Whatever the weather man at Washington predicts about it, whatever comes, — snow, sleet, slush, rain, wind, or frogs and sunshine, — March 21st *is* the last day of winter.

The sun "crosses the line" that day; spring crosses with him; and I cross over with the spring.

Let it snow! I have had winter enough. Let the wind rage! It cannot turn back the sun; it cannot blow away the "equinoctial line"; it cannot snow under my determination to have done, here and now, with winter!

The sun crosses to my side of the Equator on the 21st of March; there is nothing in the universe that can stop him. I cross over the line with him; and there is nothing under the sun that can stop me. When you want it to be spring, if you have the sun on your side of the line you can have spring. Hitching

your wagon to a star is a very great help in getting along; but having the big sun behind you —

> "When descends on the Atlantic
> The gigantic
> Storm-wind of the equinox"

is a tremendous help in ridding you of a slow and, by this time, wearisome winter, storm-wind and all.

Almanacs are not much to trust in; but if ever you prize one, it is on the 21st of March, — that is, if you chance to live in New England. Yet you can get along without the almanac — even in New England. Hang it up under the corner of the kitchen mantelpiece and come out with me into the March mud. We are going to find the signs of spring, the proofs that this is the last day of winter, that the sun is somewhere in the heavens and on *this* side of the equatorial line.

Almanac or no, and with all other signs snowed under, there are still our bones! Spring is in our bones. I cannot tell you how it gets into them, nor describe precisely how it feels. But, then, I do not need to. For you feel it in *your* bones too — a light, hollow feeling, as if your bones were birds' bones, and as if you could flap your arms and fly!

Only that you feel it more in your feet; and you will start and run, like the Jungle-folk, like Mowgli — run, run, run! Oh, it is good to have bones in your body, young bones with the "spring-running,"

in their joints, instead of the grit of rheumatism to stiffen and cripple you!

The roads are barely thawed. The raw wind is penetrating, and we need our greatcoats to keep out the cold. But look! A flock of robins — twenty of

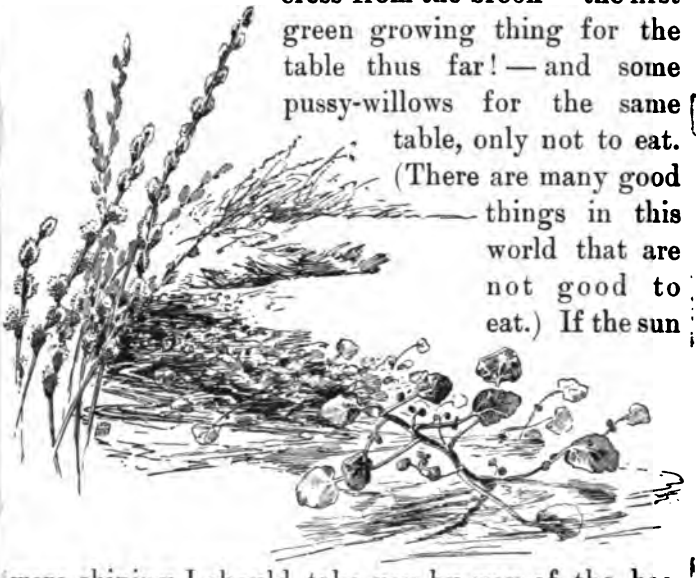
them, dashing into the cedars, their brown breasts glowing warm and red against the dull sky and the dark green of the trees! And wait — before we go down the hill — here behind the barn — no, there he dives from the telephone wire — Phœbe! He has just gotten back, and is simply killing time now (and insects too), waiting for Mrs. Phœbe to arrive, and housekeeping to begin.

Don't move! There in the gray clouds — two soaring, circling hen-hawks! *Kee-ee-you! Kee-ee-you!* Round and round they go, their shrill, wild whistle piercing the four quarters of the sky and tingling down the cold spine of every forest tree and sapling, stirring their life blood until it seems to run red into their tops.

For see the maple swamp off yonder — the ashy

gray of the boles, a cold steel-color two thirds of the way toward the top, but there changing into a faint garnet, a flush of warmth and life that seems almost to have come since morning!

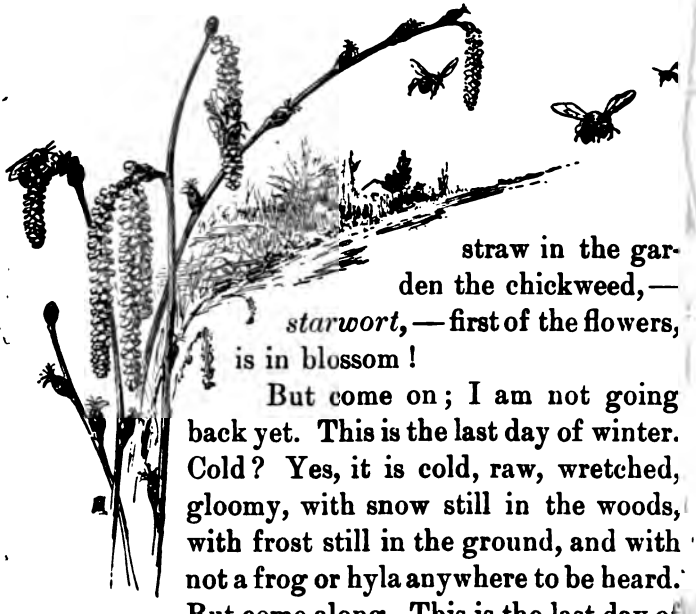
Let us go on now, for I want to get some water-cress from the brook — the first green growing thing for the table thus far! — and some pussy-willows for the same table, only not to eat. (There are many good things in this world that are not good to eat.) If the sun



were shining I should take you by way of the bee-hives to show you, dropping down before their open doors, a few eager bees bringing home baskets of pollen from the catkins of the hazelnut bushes. The hazelnut bushes are in bloom! Yes, in bloom! No, the skunk-cabbages are not out yet, nor the hepaticas, nor the arbutus; but the hazelnut bushes are in bloom, and — see here, under the rye straw

that covers the strawberry-bed — a small spreading weed, green, and cheerily starred with tiny white flowers!

It is the 21st of March; the sun has crossed the line; the phœbes have returned; and here under the



straw in the garden the chickweed, — *starwort*, — first of the flowers, is in blossom!

But come on; I am not going back yet. This is the last day of winter. Cold? Yes, it is cold, raw, wretched, gloomy, with snow still in the woods, with frost still in the ground, and with not a frog or hyla anywhere to be heard. But come along. This is the last day of winter — of winter? No, no, it is the first day of spring. Robins back, phœbes back, watercress for the table, chickweed in blossom, and a bird's nest with eggs in it! Winter? Spring? Birds' eggs, did I say?

The almanac is mixed again. It always is. Who's Who in the Seasons when all of this is happening

on the 21st of March? For here is the bird's nest with eggs in it, just as I said.

Watch the hole up under that stub of a limb while I tap on the trunk. How sound asleep! But I will wake them. *Rap-rap-rap!* There he comes — the big barred owl!

Climb up and take a peek at the eggs, but don't you dare to touch them! Of course you will not. I need not have been so quick and severe in my command; for, if we of this generation do not know as much about some things as our fathers knew, we do at least know better than they that the owls are among our best friends and are to be most jealously protected.

Climb up, I say, and take a peek at those round white eggs, and tell me, Is it spring or winter? Is it the last day, or the first day, or the first and last in one? What a high mix-up is the weather — especially this New England sort!

But look at that! A snowflake! Yes, it is beginning to snow — with the sun crossing the line! It is beginning to snow, and down with the first flakes, like a bit of summer sky drops a bluebird, calling softly, sweetly, with notes that melt warm as sunshine into our hearts.

"For, lo, the winter is past, the rain is over and gone." But see how it snows! Yes, but see —

> The willows gleam with silver light;
> The maples crimson glow —
> The first faint streaks on winter's east,
> Far-off and low.

THE LAST DAY OF WINTER

The northward geese, with wingèd wedge,
  Have split the frozen skies,
And called the way for weaker wings,
  Where midnight lies.

To-day a warm wind wakes the marsh;
  I hear the hylas peep
And o'er the pebbly ford, unbound,
  The waters leap.

The lambs bleat from the sheltered folds;
  Low whispers spread the hills:
The rustle of the spring's soft robes
  The forest fills.

The night, ah me! fierce flies the storm
  Across the dark dead wold;
The swift snow swirls; and silence falls
  On stream and fold.

All white and still lie stream and hill —
  The winter dread and drear!
Then from the skies a bluebird flies
  And — spring is here!